# 2025 Oncology Massage & Esthetics Virtual Healing Summit

## Welcome and IntroductionWelcome to the 2025 Oncology Massage and Aesthetics Virtual Summit

[00:00:00]

**Ashley Hiatt:** Good morning everyone. Welcome to the 2025 Oncology Massage and Aesthetics Virtual Summit. We're so happy to have you here. It looks like we have people joining from all over the world. So good morning, good afternoon, good evening. I'm Ashley Haya. I will be your producer. So if you have any, questions or concerns, you can pop your questions or concerns in the chat, and myself or one of the moderators will assist you.

But we're so glad to have you all here and let's begin this year's summit. Welcome. We're excited.

## Introduction to Summit

**Ericka Clinton-1:** Good morning community.

## Introduction by Erica Clinton, President of the Board of Directors

**Ericka Clinton-1:** Welcome to the Virtual Healing Summit, brought to you by the Society for Oncology Massage and the Society for Oncology Aesthetics. My name is Erica Clinton and I'm the President of the Board of Directors. I wanna start off by thanking everyone for joining us for this day of learning [00:01:00] and sharing the mission of each of our summits.

Is to create a platform for practitioners, clinicians, researchers, and other professionals where we can engage in meaningful discussions on research and explore best practices for oncology, massage and aesthetics. We hope that you will find this virtual summit clinically relevant and personally inspiring.

Our goal is to highlight the significant impact that massage and aesthetic care can have on patients, caregivers, and healthcare professionals during cancer treatment, through recovery and inter survivorship. Numerous studies show that massage and aesthetic services support those living with a cancer diagnosis at S four oh m.

S four OE. We are deeply passionate about the [00:02:00] role of massage and aesthetics in cancer care.

# Growth and Achievements of the Society for Oncology Massage and Aesthetics

**Ericka Clinton-1:** In the two years since our last summit, our community and organization have grown in ways that I could honestly only have imagined in 2023. We added a research literacy area to our website. This curated webpage lists, research articles that show the impact of massage therapy in oncology and other related areas.

We will be adding research in oncology aesthetics in the next year. We have added several international recognized education provider organizations from Argentina. Canada and Spain joining our first international educators from Australia and New Zealand. We were approached about a year ago by a group of like-minded professionals who provide oncology [00:03:00] aesthetics.

They asked us to support the development of the Society for Oncology Aesthetics known as S four OE. The addition of oncology estheticians will expand our educator and practitioner groups making a richer professional community for all of us to enjoy. As of today, we have two recognized education provider organizations in the S four OE, and we are currently onboarding preferred practitioners.

We owe a big thanks to Jeannette Durand of Greet the Day, Becky kind of Oncology Spa Solutions and Gail McDonald of S four OM, for their perseverance and commitment to getting the Society for Oncology Aesthetics to exist as a partner organization to S four OM, the board of directors. Has expanded and this growth [00:04:00] is allowing our organization to keep progressing in our mission and vision to represent the fields of oncology, massage and oncology aesthetics.

Gail McDonald, our lifetime Achievement award winner, founding member, amazing educator and massage therapist has left the board. We have

subsequently added six new board members. Kimberly Austin, certified massage therapist from California morgue, Corin Oncology, aesthetics educator and massage therapist from Canada by way of South Africa.

Sharon Pollock, board certified massage therapist and educator from Wisconsin. Elizabeth Soto, licensed massage therapist and certified lymphedema therapist from Pennsylvania by way of Canada. Nissa Valdez, board certified massage therapist and [00:05:00] licensed esthetician from Minnesota and Marcus Walsh, board certified massage therapist and regional champion from Iowa, Cheryl Johnson.

Rachel Ne Wind and I are extremely proud to serve with this group of amazing professionals. We have learned so much. From each one of them and know that they will be the group that takes S four, OM, and S four OE into the future. Events like this take a lot of work to produce successfully.

# Acknowledging Sponsors and Partners

**Ericka Clinton-1:** S four, OM, and S four OE.

Would like to thank our sponsors for the Virtual Healing Summit, pram, scientific Aromatherapy, and Heal Well. ROMs Scientific Aromatherapy was founded in 1991. For over 30 years, the company has been a pioneer in the natural health and wellness industry, [00:06:00] championing a new level of aromatherapy products with an unparalleled commitment to traceability, sustainability, and purity.

Pram offers a wide variety of essential oils, blends, and finished products that can be used daily to enhance total body wellbeing and safeguard health. Through the seasons, pram products are grown, harvested, distilled, and packaged without any harmful chemicals. Another sponsor heal well. Is an organization that is dedicated to education for massage therapists and service.

Their mission is to touch, teach and advocate. They teach massage therapists how to provide care safely and effectively heal while advocates for access to that care and for a broader [00:07:00] role. For massage therapists in healthcare heals Well's. Vision is more love. Less pain and they envision a world where everyone affected by serious illness has access to specially trained, highly skilled massage therapists as a standard of care.

Their philosophy is effective human centered care. Gil well appreciates their partnerships with hospitals and healthcare organizations that allow their

therapists. To provide care that prioritizes personal connection, quality of life, and outcomes that are valuable from the perspective of the patient and the provider.

This conference is intended for massage therapists and aesthetics professionals for educational purposes only. Classes may cover a wide range of techniques, some of which may fall outside the [00:08:00] legal scope of practice for certain attendees, depending on their individual training, certification, registration, licensure, and jurisdiction.

It is the sole responsibility of each participant to understand and comply with the scope of practice defined by their local licensing board or regulatory authority. Attendance in a class does not grant legal permission to perform the techniques taught. Please enjoy the amazing presenters presentations, and please participate in the question and answer sessions that follow each session now onto the summit.

I.

**Ashley Hiatt:** Good morning to everyone just joining us. I'm Ashley Hiatt, one of your hosts, and that was Ericka Clinton, our S four OMS four OE President. We will now be moving into our first [00:09:00] presentation and I'll have more at come in, which will be our moderator for this next presentation.

# Presentation | Aromatic approaches to Integrative Oncology Skin Health - Rhiannon Lewis & Fiona Murphy

**Morag Currin:** Good morning everyone. I would like to welcome you all to our presentation of aromatic approaches to Integrative Oncology skin health with Brianna Lewis and Fiona Murphy. I'm Morag your moderator for today's session. Please keep and save any questions you have until the q and a portion of the presentation.

**Rhiannon Lewis (2):** Hello everybody.

# Presentation by Rhiannon Lewis: Benefits of Aromatic Approaches

**Rhiannon Lewis (2):** It's a wonderful opportunity for us to be able to talk to you for the 2025 Virtual Oncology Massage and Aesthetics Healing Summit. My name is Rhiannon Lewis and together with Fiona Murphy, we are going to be making a joint presentation that is entitled Aromatic Approaches to Integrative Oncology Skin Health.

And [00:10:00] over the next hour we are going to be sharing with you some evidence-based information together with pragmatic practitioner experience on the real benefits of using an aromatic approach to patients, who are suffering with. Skin toxicities and nail toxicities linked to their oncology treatment.

So before we go further, I want to just introduce myself just briefly. as I say, my name is Rhiannon Lewis. I have had the honor of speaking at your wonderful Congress on two previous occasions, and I'm delighted to be, returning for this special online summit. I'm a clinical aromatherapist that has more than 35 years of experience, and my area of special interest is clinical aromatherapy delivery in cancer and palliative care.

And [00:11:00] since 2002, I've been a regular teacher on this topic, on this special area at a, cancer hospital in central London. I'm an educator in aromatherapy and an author. I formally edited the International Journal of Clinical Aromatherapy from 2004 to 2020, and I'm host of a special international clinical aromatherapy network that's an online network that connects practitioners from around the world.

I also organized international conference events, and that's, for that reason, I would, really extend grateful, thanks to the wonderful organization of this healing summit because I know how much effort goes into creating and hosting such a professional, event. And my basic, bottom line is that I'm passionate about [00:12:00] making a difference at the bedside, using an evidence-based, for delivering aromatic interventions.

Over to you, Fiona.

# Presentation by Fiona Murphy: Oncology Skin Health Specialist Insights

**Fiona Murphy:** Hello, my name's Fiona Murphy. I am an oncology skin health specialist based in the London uk. I'd like to say a special thanks for being asked to speak for today, and also with the guru that is Rihanna Lewis. So I feel really privileged to be a part of this, so thank you for that. a little bit about my work.

I am the founder of Sparkle through Chemo, which was the UK's first oncology based clinic for skin health. And in 2021, I became the first oncology skincare specialist in a UK hospital. I've specialized in skincare for over 20 years. Oncology skincare has been a passion of mine. It's very personal to me for the last 10 years.

And what I really wanted to do with this is to make it accessible to all patients so [00:13:00] everyone can get that input from oncology skincare, from toxicities, and also to educate people on new safety protocols in with an oncology, with both skin and scar massage as well. I like to collaborate and share my work with, oncologists and dermatologists from all settings.

I work with a lot of charities and it's something that I'm really passionate about to make this really accessible to everybody. oncology skincare is something that is forever evolving and I really love the research side of it too, and combining it with evidence-based therapies. So what

**Rhiannon Lewis (2):** are the

**Fiona Murphy:** aims for the session Fiona?

So today what we're going to do in this jam packed session is we really want to provide some great insights into skin and nail toxicity that are experienced by patients every single day. And to be able to demonstrate the potential of the [00:14:00] range of aromatic strategies that can really benefit patients from a whole array of different skin toxicities that they have with a lot of evidence base behind it, and some pragmatic guidance as well.

and also to encourage people to be wanting to be educated further in this really great specialty of oncology skincare.

**Rhiannon Lewis (2):** And we have some really clear learning points as well that we'd love to share.

**Fiona Murphy:** So what we want to hopefully do to take away today is really appreciate the diverse roles of essential oils and the related products that are really pertinent in oncology skincare, and emphasize the importance of researching.

This is something that we're both very passionate about, the different types of drugs, why they work the way they do, to be able to really offer that more personalized care for patients with clear protocols, and also give a really clear

outline of what the [00:15:00] enroll of an oncology skincare specialist is in an intricate setting.

**Rhiannon Lewis (2):** With the aims and objectives and learning points, we have come up with this joint presentation to cover certain subject areas. And I'll be starting off the first part of this presentation, I'll be sharing, a general overview and a reminder to all of us of the physical and psychological toll of skin and nail toxicities for patients that may be under your care.

And also to then step into looking at what are some of the key roles and actions of essential oils in this specialist area. And then move on to, the importance of base selection for therapeutic efficacy because essential oils on their own, Need to be delivered to the skin in a [00:16:00] range of ways, and that's where the importance of your basis comes in.

So we'll cover that as well in the first part of this session.

**Fiona Murphy:** We're also gonna go into the consultation process, which as therapists, I know that we're really used to doing, but actually going into the importance of it to really optimize outcomes for patients. And also we'll be going into a really juicy area of drugs, the chemotherapy immunotherapy, and how we can use those to plan effective care.

Also going to share with you, three case studies, that they're all my patients. and there's gonna be one for skin, one for nails, and also there's actually two for skin and one for.

**Rhiannon Lewis (2):** And then what we'll do at the end is just wrap everything up with a conclusion and a couple of issues for safe practice and some final guidelines.

So I hope [00:17:00] that, this outline of the session is of interest to you and let's jump straight in. So to start with the overview, we just have to remind ourselves that the cancer patient is especially vulnerable to skin and nail toxicities of varying severity. And these skin and nail toxicities can happen at any stage of their cancer journey and can often be.

A reminder of their disease experience. And whenever skin integrity is breached, this actually may lead to a reduced doses of treatment given or maybe even halt the treatment process altogether. So it does have a direct impact on the person's, disease journey and their treatment journey. And of course, in this

specialist area, we also [00:18:00] often have, patients that are immunocompromised.

And whenever the skin integrity is breached, this could place them at a risk of infection, that carries a certain level of morbidity. So it's really important that we find ways to promote skin integrity. And, this session is really going to be looking at that. Now there are various reasons why of course, skin vulnerability is an issue for the patients that you work with.

for example, there are chemotherapy related, skin and nail toxicities. This is an area where Fiona will really take you in a deep dive. immunotherapy targeted therapy. Initially, the targeted therapy was thought to have less side effects than chemotherapy, when in fact some of the side effects to the skin and nails are particularly [00:19:00] severe.

We also have, skin issues related to radiotherapy with radiotherapy induced dermatitis. And then there is some specific skin issues that can arise with certain procedures such as stem cell transplant or invasive procedures such as cannulation. The surgery that the person may be having with. Scarring and tissue breakdown.

And then of course, depending on the trajectory of the person's disease, they may also be linked with comorbidities. the other diseases that the person may have, but also to general health decline if that person's cancer journey, is, leads to, metastatic spread. So really, there are multiple reasons why the cancer patient is especially vulnerable.

And, th this is a, big area to focus on. Now, what are the [00:20:00] typical, skin issues that your patients may be facing? there's a list here of, multiple, skin challenges. They all are relevant and they can be, on any part of the disease trajectory, and they cannot be all of varying severity ranging from skin dryness and skin peeling to itch to swelling, changes in pigmentation, redness, rashes, reactive skin, a loss of skin tone and elasticity, broken capillaries, saws and ulcers, phototoxicity, to other specific, cancer specific challenges such as hand foot syndrome or palmoplantar syndrome or graft versus host disease.

And. What we can say here is that, all of these, skin [00:21:00] challenges have a direct impact on the person's health, but also their psychological health. And a lot of these skin challenges cause significant psychological and psychosocial distress. And the skin and nail toxicities may well be altering the person's appearance.

And often these changes to skin, are under-reported by the patient. They're often, thought of as being, something that is perhaps related to the person's vanity. So they don't dare to talk about, how their, the impact of their skin challenge. they may have more recognition in terms of losing their hair and more, freedom to talk about hair loss.

But when it comes to skin changes, then very often there is under-reporting by the patient. So we [00:22:00] have to work really sensitively, with these patients. But also another thing to say is that, the skin challenge can be long lasting and can also flare and be ongoing, even post-treatment. And so this ends up as being an ongoing reminder to the person of their disease journey.

So there's a significant level of distress and, reduction in quality of life, with patients that have skin toxicities related to their treatment. Be that radiotherapy, be that surgery, be that chemotherapy or, or other, treatments they're receiving. So this brings me onto another point, which is important, I think, to say, is that, stress impacts the skin and the skin is an important target for [00:23:00] systemic and local stress responses.

And as you can imagine, the cancer patient is often on this rollercoaster journey with their disease. And, there is heightened attention to disease and a heightened level of distress. And no matter where the stress is coming from, it may be mechanical, it may be chemical, it may be psychological. The skin is responding in the same way.

So the skin is responding to this chemical soup of stress, the different stress, chemicals by being more reactive, by being more likely to be inflamed, and also with diminished skin healing times. So levels of pro-inflammatory chemicals and mediators are elevated, and we know that psychological stress disturbs skin homeostasis and psychological stress [00:24:00] also increases the likelihood of reactivity.

And the, your cancer patient has many reasons, multiple reasons, multiple stressor that are coupled with significant psychological dis stress that are actually directly impacting their skin state. So you might be what, already anticipating where I'm headed here because the wonderful thing about using an aromatic approach is that essential oils and related extracts have an aroma that can actually give enormous support to the person from a psychological point of view, as well as being able to deliver direct physiological effects as well to help promote skin integrity and to help it to heal.

And so the role [00:25:00] of aromatic strategies in oncology skincare can help in both ways to promote, skin integrity and skin health from both a psychological and a physiological point of view. And I just want to explain this in a couple of, more slides. if we want to talk about the general roles of essential oils and related products, the first thing we could say is that your essential oils and your aromatic, extracts can provide calming and stress relieving effects.

The benefits of the true, benefits of aroma therapy really have a place in this particular area. we also know that you can use essential oils and related products to go further than that, to promote skin integrity, to prevent skin breakdown, to help with provide physical and [00:26:00] pharmacological benefits to cells of the epidermis and the dermis, and even to alter the intercellular environment to maximize tissue recovery.

They can also influence the skin microbiome, which is relevant here, especially for your vulnerable patients that may be immunocompromised. We can also use essential oils and related products to help with wound repair and reduce scarring. And then sometimes what we need to do with our essential oils is just provide a pleasant fragrance to the topically applied product to help enhance adherence to treatment.

And so there it is really the topical product or the base that is doing all of the work. But the essential oil aspect is to make it smell good and to help, e encourage compliance in the treatment that's being, suggested. multiple roles, multiple reasons. [00:27:00] I want to take you another step further.

So we've mentioned that. There is this bo both, a psychological and physiological benefit of using aromatic strategies. And here I just wanted to draw your attention to some research that talks about the importance of fragrance and skin healing. So even if I wasn't able to use topical application of essential oils, just inhaling something that is calming and pleasant, we know that in itself may well help the skin.

So it, we, know through research, a lot of this is coming from research, conducted in Japan, but we know that there we can improve skin healing times and reduce skin sensitivities with calming aromas. And as I said earlier, using a fragrance topical [00:28:00] product also helps with adherence to the skin treatment protocol.

The importance of fragrance can't be underestimated. Now if we are talking about the physiological benefits of the skin, I chose six actions to talk about just briefly that help to promote skin health and repair in oncology skincare. These

six actions are listed here on the slide. There are other actions we could talk about as well, but these are really relevant to oncology, skincare, and I'm going to make a focus on just one of them given the time of the presentation.

So the six actions, that I think are particularly relevant in this line of work is the antimicrobial properties of essential oils, the crescent properties, helping the tissue to repair [00:29:00] anti-inflammatory. Reducing the redness and the heat and the swelling and the inflammation in many of the skin conditions that we face.

Anti-aging as well, because we know that, with certain, skin reactions, we have a reduction in collagen and a reduction in, elasticity of the skin and also accelerated skin aging. there may be properties there that are relevant, to oncology, skincare, as well as antioxidant and antipyretic.

When we say antipyretic, what I mean is anti-itch. And I thought I'd take this particular quality, this particular role and give you a little zoom on this to show you that something as simple as itch has profound consequences on patients' health and wellbeing. And, we'll focus on this just to show you [00:30:00] how far we can go with essential oils.

So we take that one quality anti-itch or antipyretic, and it's a common symptom of several skin challenges that your patients will be facing. It may be caused by drug therapy. It may be, caused by dryness of the skin. it may be caused by swelling or the person's general health status. It may be to do with the function of certain organs such as their kidneys, their liver, their thyroid.

It may also be linked to psychological stress. Okay, so multiple reasons why itch is a really common feature in different skin challenges that your patients may be feeling or maybe experiencing. And this itch, scratch itch cycle is really hard to break. And the problem is that if you itch, you scratch, you get more inflammatory mediators, and you [00:31:00] get more itch.

And that if that causes skin excoriation, then you have a risk of superimposed infection and many of your patients are immuno-compromised. So that's a direct risk to the person. So one of the key mediators of itch is histamine, in response to cell injury to psychological stress or oxidative stress, the basal cells or the mast cells in the skin release histamine into the interstitial fluid that causes the typical histamine response that, you're probably familiar with.

Causes vasodilatation increased vascular permeability, and it's a, big driver of the itch sensation. So how do we work with itch with aromatherapy? with

essential oils, we do have some research about the antipyretic effects of essential oils. And, the one that, the [00:32:00] component of essentials that has the most research behind it is, A-T-R-P-M eight a, antagonist in the skin.

And it's called menthol. We find it in peppermint, we find it in corn mint, and also in bergamot mint essential oils, and is a successful component for subduing the itch sensation. It also has antihistamine properties, but we have other essential oils as well. Some of them are listed here that are typically considered for itch and that have also been researched.

there is research behind the antipyretic, effects of essential oils. Now the next point I wanted to just touch upon, before we turn over to, Fiona is the importance of base selection. As I said earlier on, selecting the [00:33:00] right medium to deliver your essential oils to the skin is really important.

So a good essential oil choice or formulation can actually be rendered ineffective if you don't put it in the right or the appropriate base. So this next section is just to run through very quickly different bases that are often used in oncology skincare to, help, promote tissue and skin integrity.

So there are some factors to take into account. If you are going to have efficacy in a product, you need to know to have not just the right essential oil choice, but you also need the right base choice and the, you need to know about the skin condition itself as well as using the appropriate dose that's going to be delivered.

So it's not, like a recipe class. There's nothing that is followed that is strict. You actually have [00:34:00] to base all of your choices on individual client consultation. So the question may be, which base is best? There are different bases that are used. essential oil always require dilution in bases prior to topical application.

And depending on the skin challenge that you're facing, there may be a range of bases to choose from that will complement the essential oil efficacy and that we can adapt for the person's individual skin challenge. the bases include, and then it's not exclusive, but here are some of the most common bases.

We may use vegetable oils, sometimes also called fixed oils. We may use infused or macerated oils. We may use hydro lats or hydrosols. And it may be that we also use emulsions or lotions or creams. And there are several adapted creams [00:35:00] on the market that really suit the type of work of an oncology skin specialist.

it's not necessary always to be making everything from scratch. They may well be a proprietary product that meets that person's skin needs. And then we also have ointments and pastes and gels. So I'm going to run through just a couple of them in the next few slides. fixed and vegetable oils, we often are choosing them based on the fatty acid composition of the different fixed oils.

we can choose depending whether they're rich in saturated fatty acids, or polyunsaturated, or monounsaturated. All of these different parameters will give us different skin effects. And one oil I've just wanted to pull out, just as a mention that is used widely in oncology skincare is tamu Oil, or Colom in oum is its Latin name and it has the most benefit, [00:36:00] most widely used in oncology skincare.

In terms of the macerated oils, there is one shining star in particular that is calendula, officinalis, the infused oil, as well as the different extracts of this wonderful plant have the most research concerning oral mucositis and radiation dermatitis. In terms of the hydros of the Hydrosols, you, these are our wonderful distilled waters that are very kind and gentle on the skin.

These quality products of distilled, water-based products, are extremely beneficial because they're cooling their analgesic. They can be sick, tricent, they can be sprayed on the skin. They can be applied in compresses. They can be used in mouth rinses and goggles. They can reduce itch, they can reduce swelling and heat.

They have a great [00:37:00] versatility in this line of work. And one example of this is Heli Hydro, lat heli Metallica, that has multiple benefits in oncology skincare. In terms of balms and ointments, there is a particular balm on the market, called poly balm that has been well researched, especially for chemotherapy induced oncolysis, where you have detachment of the nail bed, due to certain particular chemotherapy regimes.

And this is just a, an example of a firm or a hard base that is applied to the nails themselves to protect them, from, the, chemotherapy, related damage to the nails themselves. In terms of gels, there are different gel properties. They can form a protective film on the skin. They can help maintain [00:38:00] skin moisture, they can be cooling, they soothing to the skin and the mucosa.

They can really help with itch and they can help with tissue repair. And here the gel that has the most research evidence, for oral mucositis and radiation dermatitis is alle vera. a really, valuable, and well researched natural product that can really make a difference in oncology skincare.

So that was just a really quick, run through of the importance of the different bases and the basis would be chosen by the oncology skincare specialist according to the person's individual needs and combined. Or not, depending on the person's needs with essential oils that have also been chosen for that specific skin challenge.

So the next session, part of [00:39:00] the session is over to you, Fiona. Thank you.

**Fiona Murphy:** so I'm gonna start with why a consultation is really key to everything in getting a really full, rounded bespoke and prescriptive plan for our patients. It's one of the things that is the foundation of everything, and it's probably something that most people are familiar with doing, but actually this is the part where we can really get the key for getting everything for the next.

Six months, eight months of the patient. It really helps when we have, their clinic letter. It's something that I require in my consultations, because it allows me to see exactly what treatment the patient is on and what drugs they've been given and if there's any other comorbidity drugs that, that they're on.

And I can start working out a plan based on that. And I'll go into the drugs slightly later down the line. It's also a really [00:40:00] good way to educate. So many people look at skin as cosmetic and they actually forget that it's our largest organ, and this is a really good way to start to reeducate that part and get them thinking slightly differently about the skin.

It regulates our temperature. It helps us fight infection. It supports balance. It affects our mobility, how we walk, how we hold things, so we can really use this time to really change the dynamic and make it a more clinical experience with a holistic approach with it as well. It also helps us to prepare the patient for what possibly they could be facing with reactions from their treatment, which is why the key the drugs is, so important.

I know from my 10 years of, doing this and the data that I've collected, that patients have far better outcomes with dermatological toxicities. If we [00:41:00] see them prior to them starting treatment, we can also support if they're in the middle of treatment, but actually prior is always better. And we can see where their baseline of their skin is.

What type of person are they? Do they use regular skincare or have they never picked up anything in their life? And from that we can, again, make this more bespoke and make sure that we are encouraging good skin health regimes from

the beginning. And also talking about really different things. nose loss, the hair in the nose that gets lost can really, Cause bleeding, make it really uncomfortable. And there's things that we can do in our treatments that can really support that with acupressure, lymphatic drainage, but we can get all of that information in the consultation and also by doing a follow-up letter for the patient to take away. These are really important.

What we do know with this is that there is far less likely [00:42:00] for someone to miss a treatment or lower a dose. The amount of people that lose or lower a dose for nail toxicities is around 45%, which is really quite high because they weren't aware that there were things in place or supportive services that could really help them.

It's also really important to get part of their team and to get used to writing up letters to and sending it to their care teams so they're involved in what you are doing and what's going on. Touched on it earlier. Actually, they might share things with you that they haven't shared with their oncologist.

And actually it's really important to give them that validation and make it feel appreciated. But also from a clinical point of view, you don't know what that piece of information can do for their supportive journey. just going off piece slightly, I'll come back to what I'm meant to be doing, but I did have a patient who had really itchy skin and on assessment, I [00:43:00] couldn't see any inflammation.

The skin integrity was fine. I fed that back in my report. She had a blood cancer and actually the treatment regime wasn't working. That was a really crucial piece of information that she didn't share with her oncologist a few days before, but she shared with me her therapist. So all these things are super, super important to have these written down and those conversations happening.

And then obviously we've got the psychological benefits, everything changes, and really quite dramatically for a lot of patients, and we're able to support that process far more easily because we're touching them, we're seeing them regularly. They can't really avoid looking in the mirror when you are doing an active treatment on them, and that helps them see the process differently rather than getting to the end and being like, oh my God, this is awful.

Who am I? I don't recognize myself. And that is a really important part of these [00:44:00] therapies that we do. It's also important that we don't just focus on the dichotic upwards. We need to be thinking about the whole body. Sometimes

I do treatments where they've had rashes or reactions and it might be on their back, on their abdomen or on their thighs.

So these consultations that we have with them every time are super important for getting all of those vital information. It also helps us to be more supportive with their care moving forward and maintaining their patient quality of life.

So this is probably my biggest part of what I do. I do a lot of research on the different drugs that are used in, patients, whether it be chemotherapy, immunotherapy. it's something that I spend a lot of time on. I have put on here six of the main ones that get used for the most common types of cancers, for breast, colorectal, [00:45:00] variant, prostate, lung.

So I've, what I've done, and this is really how I work, is each different type of drugs have work with the skin differently or affect the skin's ability differently. And it's super important to know which ones are doing what, because you can then really tailor what you are doing for your patient. More bespokely.

So for example. When you've got the taxanes, which is super common, I'm sure lots of you have really heard of this. We know that there's going to be photosensitivity, more hands and feet syndrome, socks and gloves, hair loss, folliculitis, for example. So we can then put those plans in place prior to them starting treatment.

And that makes a massive difference because it's not just a wide open, let's try this, let's do that. We can really make it personalized. the outcomes are so [00:46:00] much better from being able to, do this. some of the drugs on here are actually chemotherapy tablets. So familiarizing yourself with these is important because it gives the patient confidence in you.

Oh, okay. You, know what I'm talking about. you know what I'm on. And that's a really important part of building up that rapport with somebody. so it's Acept. Citabine is, actually a tablet. it's commonly used for colorectal cancers. and the side effects from that are, again, photo sensitivities, dryness, hand and feet syndrome.

And what we can do when we're looking at these properties is go into it further. Why does it do that to the skin? So photo sensitivity, even on a snowy day, the part of our skin, the melanin that makes, that doesn't work. Even, it doesn't matter what's outside. So UV protection, which I'll go into in one of my case studies is, really [00:47:00] vital.

But also that educational part of it, oh, it was raining outside today, is really important to have that with the patients. so they understand actually your skin isn't producing that's why it's looking a certain way or could potentially look a certain way. you've got the more targeted ones and again, they're more rash forming and they delay wound healing.

And with that, rashes can be anywhere. And I, a lot of the ones that I see on the targeted therapy are actually on the inner thigh. So we can take our protocols. We can use it in a different area. And also when you're saying that's normal, you are really reducing that stress in the patient because they're like, oh, okay, that's not so abnormal when you can be like, no, I've seen that so many times before.

It's very common. And that's really good for the patient to hear because they're in an abnormal world and are really looking for that support and nourishment from us to be able to hold that space for them.

# Case Studies and Practical Applications

**Fiona Murphy:** So [00:48:00] this is my case study number one, and I met this patient actually, at the end of her treatment.

And her nails were pretty much detached from the nail matrix on both hands. There was severe, inflammation on the nail bed, which was causing her a lot of pain. she had difficulty getting keys out of her bag, fasting buttons, personal care. These are things that really affect people. The bigger things they're aware of.

But these things are humiliating, degrading, and actually really have a huge effect on people's self-esteem going out, mixing with people, and trying to lead a normal life when these are such severe side effects that not many people talk about. So what we did on this, the, main thing was we need to induce the risk of infection.

That's number one. So how do we do that? [00:49:00] So we can use either magnesium salts or Epsom salts, two cups in a medium temperature water with three one to two drops or of, or no oil, and they can just soak for 10 to 15 minutes. That really reduces the inflammation on the nail bed. Now on there you'll see there's some discoloration with the green, with chemotherapy nails.

That doesn't necessarily standalone saying that there is an infection there. It actually is a toxicity from the chemo and that ranges great. The one time we would suspect maybe an infection is if there was any smells, any oozing or puss

or there was now lifting underneath and you can see a fungal infection forming now.[00:50:00]

Fantastic

earthy smell and So five weeks post therapy, what we can see is there is, if you look closely, you can draw a line the whole way through the nails. And I use a breathable toxin-free nail polish called Soya or Ollie breathable. There's lots of evidence behind this and it helps, with make detach, lack of detachment.

Really, we wanna keep the nails together so the nail polish, we can start prior to treatment and that can help reduce the photosensitivity. And that's really crucial, [00:51:00] to stop the nails from becoming detached. It doesn't necessarily stop the discoloration, which is really important to manage expectations that can still happen.

But our number one is not have infections and to keep the nails attached. There's, like I said, there's lots of evidence behind that and it's something that I use really regularly.

So this particular case study, it can, it's really important to know that even if your patients nails are doing relatively okay, especially on the taxane chemotherapy, you can have a delayed nail toxicity for up to eight months. Post the final chemotherapy infusion. And that's really crucial to know because they could go to bed one night with normal color nails and wake up with a completely different color.

What we do know is that having regular nail treatments throughout treatment really minimizes these [00:52:00] effects and we can address them far quicker before it manifests into something that can affect their treatment and also their wellbeing as well. The studies have shown that a darker nail polish has up to 500 SBF protection, which is really crucial, in maintaining the, structure of the skin on the nails and making sure that we are giving the patient the best chance of, keeping their nails Always use an acetone free nail polish remover.

Some might say it's drying, but on the balance of the different things, it's, the one of the lesser, you'd take the hip for that really, and just use a, hand cream as well. like I said, the magnesium and oregano are really good anti-inflammatories and they're great natural antibiotics. This case study really highlights the significant impact of chemotherapy on the nails and on [00:53:00] quality of life of people and why early intervention is so important.

We do need further studies on this, but actually from my 10 years of doing this, is a great way of protecting them. It's usually there's something else underlying is with comorbidities, but what is great is that we're never stuck. There's always something else that we can do to support.

This is my second, case study and this is photo sensitivity. So the first picture of the darkened skin, was literally taken six days before the after. And the patient's symptoms were almost like he had been burnt. And actually he thought he had got into a bath that was too hot. and he'd been on chemotherapy for two and a half years.

So he thought his skin was just really sensitive. it wasn't, he couldn't pick things up. He'd lost [00:54:00] sensitivity. He couldn't do basic self tasks. The skin was peeling. It was starting to blister and it go, although you can't see it in the picture, it literally goes up to the wrist. So we call this socks and glove syndrome with photo sensitivity, because on the feet it tends to just go up to the ankle.

As well. So what we did with that was it's a huge emphasis on the repairing the barrier of the skin. I'm a huge great fan of UV fingerless gloves that they work fantastically at, supporting the skin and also protecting them. And you can get them in fun different colors as well. So you can have someone's personality included on this.

I used, Mugu Re Mugu is a brand that I use a lot and it is available worldwide, including America. And if you are in the uk some of these products are actually available on prescription. what's [00:55:00] great about them is that they're natural products. They have a milk protein, which helps the elasticity of the skin and it helps report repair the skin barrier too.

So the outcome in clinical significance was huge within six days. This was the difference. We were able to restore quality of life and the patient regained comfort and was improved functionability. There was no need for his weekly treatment to be, reduced or his treatment to be interrupted. the day that I took the picture, which was the second one he was actually in for his bloods and to see if it had improved, to see if he can continue treatment.

We also reduced the infection risk by using proactive skincare and UV protection to minimize the complications.

So this is my third and final case study. this is a patient, that came to me through in the middle of her treatment. She's a [00:56:00] colorectal patient, and

her chemo regime is folfox, five U and Oxy Platin. And as you can see, it's. Severe reaction irritation, skin peeling facial dermatitis. It took me 45 minutes to take her makeup off without her skin bleeding.

And it was the first time that her skin hadn't bled for months prior to her taking her makeup off. She's a primary school teacher, so she's facing young kids, so she really needed that to be covered and also to be protected around germs, which is obviously a huge risk for someone who's immunocompromised.

It was also extremely painful. It was about to stop her treatment and we really needed to work on supporting her skin barrier.

So the reason why these, I've broken down why each of these [00:57:00] chemotherapy drugs do what they do, and it's really, this gives you a really beautiful insight actually, of how we were able to get. The after effect and the improvement of her skin. So we can see that because of this photosensitivity was increased.

The rate of her cellular renewal was really slowed down, which was causing huge inflammation and inflammatory issues. The hypersensitivity, especially because it's in an area where the sun is exposed all the time and her immune system is really compromised. So actually her rate of renewal was even slower than before.

You can go through these and see that her skin was peeling, she had pneumonitis. There were so many different things that we needed to address on this. So we went back to pretty much basics. What did we need to do first we needed to repair the skin barrier. [00:58:00] So on the next slide, we can see this was after four weeks.

So she had a treatment with me per week and she had a home care regime, so it was a great outcome. we significantly reduced the redness, the irritation, we improved skin, hydration and flexibility, and we restored the barrier function of the skin. Tamu, which Rhiannon already, spoke about is fantastic anti-inflammatory.

It's great, it's used for burns and scars and bites, and it was particularly great for this, reaction from, for this patient. it's rich in antioxidants. It's great for stimulating collagen production, enhancing skin regeneration, and it's also great for antibacterial properties as well. and stopping secondary infections from, happening, [00:59:00] which is great.

I also just wanna add in here quickly that it's really important to have conversations that the skin might not always stay like this. As she has treatments, the skin will flare and it will come down again and flare and come down again. And that's really normal. Her skin didn't stay like this permanently.

It never went back to how it was when I first met her. But we had to deal with the up and down from her treatments and make the whole thing more manageable, which we absolutely managed to do. And I still see her to, to this day. I've just added on here the mugu that they can contain. She butter, alle vera coconut oil, and it's great for restoring hydration and it also helps to prevent discrimination.

So we didn't really want that to happen when her skin was so thin and fragile. pH balanced and fragrance free, which minimizes further invitation for her skin. they've got ceramide [01:00:00] in them, which is great for promoting epidermal renewal and really just aiding their recovery of the acid mantle. So the outcome, was a huge visible improvement.

a reduction in erythema in the inflammation. We managed to restore the skin barrier. Hydration levels were improved and reducing the peeling and sensitivity. Most importantly, we increased comfort. Patient reported significant reduction in burning and discomfort, and actually quality of life. Being able to go out without feeling so self-conscious, not putting on so much makeup and not having skin that's bleeding and waking up with blood on the pillow.

I think the key clinical things to take away is that aminu is a really great anti-inflammatory, with lots of different properties, beneficial in post chemotherapy skin recovery too. Mugo skincare supports hydration barrier repair, and against further irritation. [01:01:00] Early intervention with the natural base ammo can really accelerate skin healing without harsh chemicals.

# Clinical Impact and Final Thoughts

**Fiona Murphy:** So the clinical impact of skin toxicities. So looking at the taxanes that we can see, nail dys dystrophy is 44 to 80% of patients that's really high. hand and feet syndrome, 30 to 50% of cases alopecia, 80% with docetaxel, but probably most of the taxanes as well. I think if you have a chance to, go through these, you'll probably recognize some of these treatments and regimes and be able to see where they might be able to fit in better with your practices.

and looking at the impact on treatment's outcome, severe toxicities leading to lower a dose in treatments or delays are in 30 to 40% of cases. So that has a

really emotional. Impact as well as a physical [01:02:00] impact on somebody because you get yourself psyched up for your treatment yourself, psyched up for your treatment and then you don't get it done.

and also we've got the psychological and emotional as well. So 30% of people experience anxiety or depression related to dermatological side effects. And overall people don't tolerate treatment as well when they have dermatological toxicities that aren't being treated as well as they could be.

**Rhiannon Lewis (2):** So we are at the end of the session and we thought we'd just share some final points.

# Proactive Skin Management Benefits

**Rhiannon Lewis (2):** The main message of this session, Fiona,

**Fiona Murphy:** so I think you know, what we really wanted to share with you is proactive skin management reduces. Toxicity severity. It improves treatment, adherence and enhances patient's quality of life, which is therapies is what we're all about.

**Rhiannon Lewis (2):** I so agree, and it's, this [01:03:00] importance of being able to help restore the skin, integrity and at the same time improve the person's quality of life and their, emotional balance and to help reduce their stress. It's all part and parcel of our holistic approach as therapists. And the one thing that, that Fiona said, earlier on as well is that, patience is required because this person is on a journey.

Your individual patients on a journey, and a lot of these results that you see. C to this in skin don't happen overnight. And in terms of waiting for real results, to really restore the skin integrity you need to be patient. And that's where compliance comes in and adherence to the treatment regime.

So for your patients to really adhere [01:04:00] to what you're proposing, that's a big part.

# Managing Patient Expectations

**Rhiannon Lewis (2):** Do you wanna say something about patients or, the length of time? Fiona, do you want to add anything?

**Fiona Murphy:** Yeah, I think managing expectation and also that things do change and patients, when they, will say it themselves, actually every week or every three weeks, there's something different that crops up.

And this is where it's really vital that we know what treatments that they're wrong. Because we will be used to that. We'll be able to say, yep, we've seen that before. That's because of this, and this is what answers that. There will be something that we can swap and change to support that. And actually it's really normal for these things to not just go straight up.

There'll be peaks and troughs throughout it. And I think when they hear it from someone and they know that's normal, they can actually just be like, okay, that's fine.

**Rhiannon Lewis (2):** Yeah. It's so important, isn't it?

**Fiona Murphy:** Yeah. And

# Safety and Flexibility in Treatment

**Rhiannon Lewis (2):** then [01:05:00] really, the other comments that we, thought of was, to say that of course as practitioners we always need to be safe.

And, we need to know indications and contraindications when it's appropriate to treat, when it's not appropriate to treat, when it's important to refer, to, to a specialist. And I think we need to have that safety hat or that safety helmet firmly on and related to dose as well. And, always using the minimum effective dose to get the maximum therapeutic benefit for that person.

And I think something else that, you've just said Fiona as well is that, nobody's, trajectory, O of their disease and its treatment is, straightforward, and clear. And there is a, there are a lot of [01:06:00] ups and downs and there, it's, quite can be a rollercoaster.

And so flexibility and the, ability to adapt to the. Patient's needs in the present moment, are so important. Do you want to comment on that?

**Fiona Murphy:** Yes. I've been speaking about this care plan and you know how that looks. So sometimes people say, so should I come and see you every three weeks or every six weeks?

How does that work? So what I will always say is, we can have those planned, but things are changeable. So it might be three weeks, but you might need to come and see me beforehand. for me personally, how I work, I like, I don't like people to wait if there's something. So I would prefer that and I encourage that open conversation between myself and, patients and also.

I would really encourage you to build up rapport [01:07:00] with their healthcare practitioners, which can sometimes feel slightly overwhelming, but actually your input is so valuable to this patient and their overall care, and for them to get the best treatment, your input is required.

**Rhiannon Lewis (2):** Wow. Yeah. So important.

# Holistic and Personalized Approach

**Rhiannon Lewis (2):** And then of course, we, both of us are on the same page about the importance of a holistic and personalized approach.

There is never a one recipe that fits all or one protocol that's going to address a specific health need and, in skincare management. that really, we really can't, overestimate the importance of taking the time for that consultation and to listen, to the person's needs and to adapt and our treatment approach effect, appropriately.

And then of course there are boundaries and limitations. [01:08:00]

# Training and Education in Oncology Skincare

**Rhiannon Lewis (2):** to work as an oncology skincare specialist isn't something that will happen as a result of listening to this lecture or taking part in this summit. we know we need to know, our own boundaries and scope of practice and the training that we need as well, to be able to deliver effective skincare to, this very special group of patients.

training in essential oils, training Using different base products, training in the skin and nail toxicities that are commonly, encountered in cancer care. we, the educational element is really important and we do need to know that you cannot just step in and follow a recipe, that you've read on the internet or that you've, found in a book.

You actually do need [01:09:00] to know the tools you use and be equipped with the skills, to consult effectively with the patient and to respond appropriately. Do you want to say anything to that Fiona?

**Fiona Murphy:** Yeah, I, think that's really important. I think knowing that your scope of remit and knowing where to stop and actually getting the appropriate training is really important.

And I'm really looking forward to launching courses on what I've learned and my research that I've used over the last 10 years and sharing it with everyone. So actually we can really up the level of clinical excellence that we're offering to these patients.

**Rhiannon Lewis (2):** Yeah. It's so important and hopefully that this session has inspired you all, to really consider the potential here of using these aromatic strategies to [01:10:00] making a huge difference, for your patient's skin health.

I. So we started with the aims of the session. I hope that we have helped to provide insights into the skin and nail toxicities that are experienced with patients. We've hoped to demonstrate the potential benefits with a range of strategies and case examples, and also to encourage you. To step up to further education in this emerging field of oncology skincare.

We also wanted to, as takeaway points to help you, appreciate the diverse roles of essential oils and related products that are pertinent to our, to oncology skincare, and emphasize that importance of really taking that consultation time and re researching the patient's specific treatment and drug regime to optimize your personalized skin, care protocol.

And then of course, [01:11:00] especially for Fiona, as an expert in this field to clarify that role of an oncology skincare specialist and the place in integrative care. So we hope that you've enjoyed this session. And we are really looking forward to connecting with you. You have our email addresses to reach out directly, but also we are looking forward to your questions live at this wonderful virtual oncology massage and aesthetics healing summit.

So thanks everybody for attending and we look forward to your questions.

# Q & A | Aromatic approaches to Integrative Oncology Skin Health - Rhiannon Lewis & Fiona Murphy

**Morag Currin:** We are now reopening the chat for questions. and Fiona, fantastic presentation.

Thank you so much. your sharing of knowledge and insights is so valuable and I'm excited to dive into deeper questions on, on your particular topic, which is approaches to aromatic integrative [01:12:00] oncology, skin health.

# Addressing Fragrance Sensitivity

**Morag Currin:** when there were a couple things that were just jumping out at me when you were doing your presentation and, Rihanna, and I think I'm going to tackle this question with you first on the fragrance free thing.

Fiona had mentioned, or in one of your slides there was fragrance free products, but how we are dealing with essential oils with people that are having a re a response to the essential oils.

**Rhiannon Lewis (2):** Yes, thank you, Morga. I hope you can hear me. yes you can. Okay, great. Yes, thank you. for, that question. And certainly, in certain situations fragrance free products are the most appropriate for very damaged skin. That, that the essential oils might be not appropriate at that time because you have of course, increased skin sensitivity and your essential components, which are essentially chemicals could, could, could affect that. [01:13:00] and of course all essential oils are fragrant. So, there are ways to get around it though. If you remember in my session I did mention the importance of stress and how stress itself increases skin reactivity. And so what you can do here is you can use in terms of what is topically applied fragrance-free products, but those fragrance-free products remember, are rich in active agents like your tomato and aloe vera and calendula that we've mentioned already in the session. And you can save the essential oils for their aroma power to reduce the person's stress. So the person could have an inhalation device, it might be an aroma stick or, maybe some diffusion that the essential oils are delivered through, through inhalation, if you like, for the, to get the full benefits of the stress reducing, And then through the research that [01:14:00] we know, that does exist. Now is that just by reducing the stress response, the skin has a better chance of healing. So even if you're not putting essential oil directly on the skin, maybe it's not

appropriate, maybe you need to stay fragrance free. There's still a place for aromatherapy.

**Morag Currin:** So Rihanna though, if somebody has a clinic or a spa and they are using essential oils, that might be through, inhalation, that might be through topical. what if the next client, who also is a cancer survivor, has a, an adverse response to essential oils? How are we sort of combating the air and the space from one patient or one client to the next?

**Rhiannon Lewis (2):** That's a, that's a very good point that you've raised Morag. And it's especially relevant when people are hypersensitive to fragrance. lot is in the dose. Okay. So [01:15:00] in term term, in typical situations in cancer care, when you are using essential oils, for patient benefit, you are working at a very, very low dose. And so by the very nature that you're working low dose, the chances of another person having an adverse reaction who's come in the room afterwards, is actually very low, even if that, that product was topically applied. another way that you can get around it, which is increasingly, used and is has some lovely research behind it as well, is the use of personalized aroma inhalers. So these are patient delivered one, for each individual person that will look a bit like a, a Vix vapo inhaler, and the aroma strategy is delivered just to that person's nose and then is closed again. So there's no diffusion or aroma in the space, in the treatment room. [01:16:00] and so it's only limited to, to that person's experience, and that's another way to get around it. What we do try to do, is say to people, if you have diffusers running in your clinic, if you are actually using essentials for ambient diffusing, that's much more difficult to control because the person is exposed to the aroma without their consent, if you like, and they might, negatively imprint the aroma that they did not choose with a negative experience.

So in cancer care in general, we don't do a lot of diffusion, because of this situation where there may be multiple people in a room or a client coming later, but we, it's, we can still deliver aromatherapy with inhaled, inhaler devices or patches or, there's a whole range of different strategies there.

# The Importance of Essential Oils in Oncology Skincare

**Morag Currin:** Yeah, I [01:17:00] personally love the inhalers because it also gives that survivor the control they can actually sniff at it when they actually need it as well.

**Rhiannon Lewis (2):** Indeed.

**Morag Currin:** awesome. And I think it's so important because I think there's not enough information about essential oils out here used in oncology skincare. And I think that, a lot of estheticians and beauty therapists would like to use more of it. And also there's been this huge shift from, skincare products used in the past that have been heavily fragrance to working with fragrance free products. wouldn't say the issue was more with cancer survivors, I would say it was more with, aestheticians and beauty therapists. To shift from moving away from fragrance to fragrance free. So, I think your, your information on the essential words is absolutely valuable. So thank you very much for that.

# The Psychological Impact of Nail Care

**Morag Currin:** My next question is going to be thrown at the owner here on nail care. so important. [01:18:00] I think that it's so underestimated the nail care side of things and I think that the psychological impact of nail care is more important sometimes other than the actual physical. so Fiona, can you give me a little bit more information just to share with everybody about how important it is even for somebody who, as and I know you work in palliative care, just for somebody to have those nails painted could be the last thing that they ever have in their life and how much they really appreciate it.

**Sparkle Through Chemo:** Yeah, and I've actually had that situation. end of life patient always had her nails done. They knew that she was gonna have an, an open coffin, so we made sure that she got her what she wanted. So we painted her her nails for her. And that emotional impact is huge. Not just for her, but for how her family want to remember her.

She always had her nails done. Always very glamorous. And I think you can't dismiss [01:19:00] that side of things because usually it's part of our personality. It's what we do. We go get our nails done. So not taking anything away from making people feel like it's superficial when it's not, it's a real important part.

Everything's being taken from you that actually you can keep a bit of, of yourself. And with that point, with the nails, and I've shared this and if you've heard this before, I apologize, but I had a lady and, she lost all her nails and she said, I didn't just lose my nail, but I lost my voice because she speaks with her hands. So nail issues are huge and they really shouldn't be underestimated. And it's probably, which is, goes into another question, one of the main things that I deal with hands and feet, both male and female.

**Morag Currin:** Yeah, know. And I just think that, a lot of therapists should be aware that the hands and the feet and just that appearance side of things besides the actual physical issues really [01:20:00] need to be addressed. And I think there needs to be more training and stuff out there. Now I have so many questions coming for you guys. I'm gonna be running out of time here, so I'm gonna shoot to something else here.

# Early Intervention for Cancer Survivors

**Morag Currin:** Early intervention, Fiona, mentioned that earlier. And so when we is reaching out to these cancer survivor. because there's a, a whole process when there's a, diagnosis, there's that, oh, there's a suspicion lesion or a lump or something other, and then we're going through a bunch of testing and depending on the type of cancer treatment starts immediately or there's a little bit of a space there. when we, is it that we are reaching out to these cancer survivors? Are we having to reach out to oncologists, anybody involved in the world of cancer and say we need to have these patients of yours sent to us prior to them starting [01:21:00] treatment? How are you approaching it in the uk?

**Sparkle Through Chemo:** So when I first started up sparkle through chemo, that was what I wanted to do. I needed to get that catchment of patients, so I worked and did networking with oncologists. we have CNSs or macmillan nurses, cancer nurse specialists, and a lot of the, seminars and things that I was going to, it was a part that the oncologists were amazing at their job, but actually they didn't really know enough about this, but knew it was an issue for their patients. So I built up my, relationships with the oncologists, the surgeons and the nurses and my referrals come straight from them, not necessarily the patient.

**Morag Currin:** Okay. Yeah, that's really important. are you finding the oncologist open, to having you work with their patients and stuff like that?

**Sparkle Through Chemo:** Very much so, and [01:22:00] they, they really cannot wait to give their patience because that's not their specialized area. more they got to know me and I up my reputation of what I do and were results, it just went like.

**Morag Currin:** Yeah. Fantastic. Thank you for those answers so far. I have another question here. So we are jumping all over the place, radiation in two weeks. What are preparation skincare, hang on, I'm just reading it as it's written here. Pre radiation in two weeks. What are prepar?

# Pre-Radiation Skincare Recommendations

**Morag Currin:** I would say preparation skincare can participant use to lower the side effects for stage one lumpectomy two weeks ago. So I, I'm, if I'm understanding that correctly, I guess this is just preparing the skin prior to radiation. What is your recommendations for that?

**Sparkle Through Chemo:** So I would always [01:23:00] recommend to my patients to use, mugu, which is I I've said before, you can get that worldwide. They've got the udder cream, which you would use to start improving skin health, start getting the elasticity. And just in preparation for that, you can use that alongside your radiotherapy regime that you are given by your hospital. And it's important to let them know that you are using it. Don't use them together, but you can use it alongside it and you can use it post as well. But it really does help to prepare the skin. And they also have a milk wash, which I recommend to my patients as well.

**Morag Currin:** Could you jump in on the essential oils or hydro soles or anything that you might recommend from a pre radiation, because there is more evidence out there now that preparing the skin prior to particularly external beam radiation is who leads hugely beneficial to the skin. And of course the barrier [01:24:00] is being impacted as well.

So is there anything in the essential oils and research there that you can also recommend?

**Rhiannon Lewis (2):** Yeah, the, I think the, the one thing to say, and that isn't necessarily brand specific, is the goal pre, pre radiation is to help the skin be in, its as best a state as it possibly can be. So one of the, key, cornerstones, if you like, of skin integrity

**Morag Currin:** Yes.

**Rhiannon Lewis (2):** mo is the moisture content. the humidity of the skin and the, the moisture content, of the skin is really, really important.

So even if the person is starting, prior to, to, to treatment, really nourishing their, that skin area and helping it be in as best a state as possible and as [01:25:00] well being adequately hydrated and, having a good nutrition and, consuming an antioxidant rich foods and really putting your whole body in as good a state as possible.

I think those are things that, they're not necessarily brand specific or essential or specific, but they're very basic good advice to, to give to somebody. in terms of skin protection in the essential oil world, there are, there's a little bit of evidence out there for certain essential oils, but they need to be, they would need to be used in a very controlled way and with appropriate training. one essential oil that has been used for many, many years to protect the skin against radiation induced, skin, skin reactions is, nili essential oil. It's called melaleuca kinia. It's the Veda floral Chemotype. [01:26:00] there is some work in France and it's, has a very long tradition here in France as being a protector of the skin.

However, you do need to be appropriately qualified and have the knowledge of how to use that, and also whether you are allowed to within your scope of practice, is another issue. there is also, in terms of the basis we mentioned, particularly encouraging is calendula. So, calendula does have evidence in skin protection with regards to radi, induced dermatitis.

So if the person was using a calendula based cream and as a moisturizing, it could be a fragrance free cream, but really just to give as much, benefit to the skin possibly ahead of treatment, you are already setting up the chances of a reduced or of reduced risk.

**Morag Currin:** [01:27:00] Yeah. Rihanna.

# Essential Oils and Hydrosols for Cancer Care

**Morag Currin:** when it comes to essential oils, if somebody is not using essential oils with cancer survivors at this point and they really want you to get into it, do you have three? I mean, there's so many of them, but can you give three go-to or essential oils that you would always have in your arsenal to use, for example, years ago? We had a reaction to a cleanser being applied to somebody who was a stem cell transplant survivor. Now, I think she was a vi a survivor of like two years already, but the cleanser, which was for a sensitive skin, was very reactive. and her skin did respond negatively. So what we did was remove the product, but we used a peppermint hydro sole. And the peppermint hydro sole seemed to have that, anesthetic effect for a while and just allowed the skin to just calm down at that point. So, so it's kind of, it's almost like having [01:28:00] emergency products there just for something. What would you have if you had to have three that you would recommend, whether it's a hydrosol or an essential oil?

**Rhiannon Lewis (2):** Yeah, so why don't we take, of each, certain, certainly, would have definitely calendula infused, oil. So that is the calendula flowers that have been macerated a fatty base. the fatty base is olive oil, but sometimes that that changes. That would be an absolute, me, that's an essential in my toolkit for skin management. terms of other base, let me, let me, let me give four, tomato that we mentioned. absolute classic as well as Fiona. So, so well described. the thing about nu is that it's used in treatment rather, rather than, I, I saw a comment [01:29:00] in, in the chat somebody was saying, could I use this as a body massage oil?

As I would say no, because it has a very strong aroma. it would be used in specific skin situations, and it's usually with other oils as well. So that's a fixed oil, that's a, that's a, a vegetable oil, that has remarkable properties, but it has a particularly nutty odor. and you couldn't put that over large body areas in a regular treatment, but it's good for treatment of the skin itself with essential oils.

it is hard if, if you look at, aroma therapy as practice in oncology care and palliative care, is the number one essential oil used. And often because of its also its skin benefits is lavender. So lavender essential oil, is crucial, quality. Lavender oil, not, not buying something [01:30:00] that's, low cost, maybe one that's been adulterated.

But knowing how to source a high quality lavender oil as somebody is in a, starting at a starting point is really one of those ones that's unbeatable because it, it meets the person on all levels if the person likes the smell.

**Morag Currin:** Yes.

**Rhiannon Lewis (2):** so you know, it's relaxing. It helps a person sleep, it reduces their stress, but it's also anti-inflammatory.

It's also antioxidant, it's also analgesic, there's like so mul multiple physical benefits of this remarkable oil too. It is anti infectious. in the hydro lat world, you mentioned peppermint hydro lat. That's particularly good where there is pain and itch. it's, hydro I wouldn't say is the, like the number one that would be used in oncology care. purely because it's usually used in small areas. You couldn't put peppermint hydro all over the body either, 'cause it's very, very cooling in its [01:31:00] effect. But for some somebody, if you're looking for a gentle hydro lat that's going to address multiple issues, help the person feel nurtured as well.

I would suggest rose hydro LA because it's also addressing em emotions. at the same time as being remarkable on the skin. For skin repair. It's very gentle, it's anti-inflammatory, it's antioxidant, it's anti elastase. So it has multiple physical benefits too. But there's this other side to it that's very emotional. So I think I gave you four ideas, but then I'll throw in a fifth one and I would include alo aloe vera.

**Morag Currin:** Yeah, no, those are all fantastic. I think that we all really need to have a small collection of whether it's your all vera gel, your calendula induced oil, or essential oils, hydro, hydro, lats, whatever, just there in case you need it as well. But yeah, that's fantastic.

**Rhiannon Lewis (2):** If I just may [01:32:00] add though, dose is everything, and especially with essential oils, because you are already in a vulnerable, the person's in a vulnerable state, with their skin. So knowing how to dose and knowing how to use oils and avoiding overexposure, giving good advice to patients as well. And this, I think is something is worth mentioning. You may have wonderful results with the essential oils in a treatment context. And, you've told the patient what you've used, et cetera, et cetera. And when they go home, they may be so enthused by what you have done and what results they've had. They may then start to be self-administering and people, when, when you're in a desperate situation, when you are very, very, emotionally involved and highly stressed, if somebody says, we've used a single drop of lavender oil in this cream for you, they may [01:33:00] think, well, my skin is so bad now, I, it one drop isn't enough.

And they may be thinking that more is better. So, that could put them at risk. So always looking for the minimum effective dose and always supporting the person with excellent advice, safe sound advice, and saying, don't hesitate to come back to me for advice, rather than them doing a doc to Google and researching on their own and coming across very unsafe advice out, out in the wild west of social media.

**Morag Currin:** Yes, absolutely. And that is what a very true statement. sometimes people think more is better and with essential oils, boy you can be so irritated very easily with essential oils and unfortunately, a lot of people do try and self-administer at home without really thinking about the repercussions there. that is so much great information. So thank you so much. I'm gonna switch back to Fiona here.

# Nail Care Products and Techniques

**Morag Currin:** I've got [01:34:00] lots of questions on the nails here. I know you did mention some nail polish. Zoya I think was one of them, and I know that there are a bunch of other nail polishes that were cleaned up, like OPI and some of the other bigger brands were cleaned up at one point, but nail polish names.

and then yep, there were a couple questions on nail polishes. And then Fiona also, they wanted confirmation that Epsom salts and orano essential oil is good to treat nail fungus, which I believe you had mentioned there, but you also had mentioned that it was for the nail lifting. and then the third part of your question is after 24 months post-tax, or what is the hope of the recovering nail bed?

**Sparkle Through Chemo:** So I'll, I'll start from, from the beginning. So the nail polishes that, that I use are Zoya. They've got a huge range and they actually have a [01:35:00] UV protection top coat, is incredible. and what I do like, but they're breathable. So actually they can still use their nail oil in their hand cream and it's still gonna get through to the nail.

So you're not getting that dryness, that you would with the non breathable polish. So Zoya, I've, I've used them pretty much since I started. they've got a huge range of colors. prior, cancer patients would be seeing black nail polish, and very 2004. So it's not very, it's not normally what someone would choose to, to go for. As long as the polish is opaque, it has a huge SBS protection factor and there's been studies done on this. all of that information I've got from research and from studies that have been studies carried out. the other one brand that, that I use, and there are other ones, I just particularly like to keep to, to two.

I keep it simple for myself and I've had great results [01:36:00] with both of these is all breathable. and that's actually, you just need that one polish. It's a base color and top. So if someone is not used to doing their nails or they want something really quick, it's a really good brand to, to go for. so that's why I like both two particular brands.

It covers most people, which is great, and both of them have good color selections as well. the second part of the, with the oregano, when it lifts the nail lifts, you are at much more risk of getting an infection, being immunosuppressed. So I tend to use that as soon as there's a nail lift to help minimize that. so I will do two cuts of Epson salt in a median temperature water with two to three drops of oregano. Oregano has far better results than tea tree oil, which is most people's go-to for a fungal infection. [01:37:00] I always warn the patient that it has quite an, I say earthy smell, just so that they're aware

of that and they just need to dip their hands or their feet for 10 to 15 minutes and it's built up.

So we'll start with twice a week and then continue for the next couple of weeks. So you are every other day just to see how someone gets on with it really. but always patch test, which is really, really crucial. and when I do patch testing, I always, especially with essential oils that are blended, if I know they're gonna be used, I do it behind their, it's a far better when their skin's reactive to know if they're gonna have a reaction somewhere. so yeah, so the orno does help with, nail fungal infections to help prevent and also to treat, if the nail, especially if the nail's lifted. but sometimes the nail doesn't need to be lifted to get a fungal infection. You only need to really refer if you're [01:38:00] starting to notice that the fingers or the hands become hot, there's some pus oozing, then we know that we've got an active infection.

We remove or polish. We don't rep repaint, sorry, until we get the all clear that, that, that's cleared up. But we hope to prevent that from happening.

**Morag Currin:** Fantastic ladies, we are running out of time here and there's still more questions to be answered, so Rihanna and Fiona. Amazing. Thank you so much. What a great discussion. Everyone. Please note we will take the questions that we did not get today and compile answers to be forward to you later.

Enjoy your break.

# Presentation | What's different about massage in a hospital with Carolyn Tague?

**Ashley Hiatt:** Hello everyone, this is Ashley, your one of your moderators. we'll go ahead and welcome everyone back from break and move into our next session, which will be moderated by Kelly Joe Webster. So Kelly, whenever you're ready to come on in here, go right [01:39:00] ahead.

**Kelly Jo Webster:** Hey, good morning, afternoon or evening everyone. I know we have people joining from all over the world, so I appreciate you all. taking. Out of your day or night to be here with us. , I would like to welcome you all to our presentation of what's different about Massage in a hospital with Carolyn Tag. I'm Kelly Joe Webster, your moderator for today's session. Please save any questions you have until the q and a portion of the presentation.

**Carolyn Tague:** Hello everyone. So great to be with you at the Society for Oncology Massage Healing Summit. My name is Carolyn Tag and I am a massage therapist. I'm an educator and I am, I've been a S4OM preferred practitioner as well as an educator for a lot of years now. So really, again, very happy to be here with the tribe.[01:40:00]

So thank you for attending. Thank you for your interest in hospital-based massage therapy. That is the general topic for my presentation today. And as you can see the title here, what's the difference what's different about massage therapy in healthcare settings? So I, in the way of background, in addition to my work with S4OM I have been a hospital based massage therapist for over 15 years.

I've been a teacher, an instructor for hospital-based or healthcare based massage as well for going on 12 years maybe. And so currently I'm at the University of California San Francisco, where I have a year long fellowship program that I manage and I'm the lead instructor for we have fellows come in, massage therapist professional certified massage therapists come to our program for a year.

And they study with with us, and they [01:41:00] also do direct patient care. So for 12 months, they're with us two days a week. And they get to see virtually every type of hospital patient, many of which are oncology patients. And so I'll talk about a little bit about that as well. Also in the way of background I studied with Gail McDonald back in 2005 when I was an intern in a similar program that I now instruct for.

And then I guess fast forward 20 years, I was privileged to be asked to co-author the textbook on hospital-based massage therapy, hands in healthcare. So very happy to have that opportunity with Gail McDonald. And that's a textbook that we have and. It's what I use in my class. Super convenient.

What else can I tell you? So I've worked at four different hospital systems. I'm in San Francisco and we have lots of different hospital systems here and I've worked in many of [01:42:00] them pediatric as well as long-term skilled nursing facilities, acute care, ICU yeah, pretty much everywhere and and lots of different settings.

We also, I've also had experience with hos hospice work mostly in home, so going to people's homes for hospice care. And I think that's it. If there's other things to tell you about myself, I will add them in. I guess I could also share that. There's an organization the Association for Massage Therapist and

Healthcare am tic that I co-founded with Karen Armstrong of Corwell in the Michigan area, Detroit area.

And so we are happy to be getting that launched and off the ground and still a work in progress, but it's really intended to help all of us who are in healthcare settings have some [01:43:00] resources and some community and things. I think that's it in the way of introduction.

So I will be happy to answer questions during the live presentation portion as well. So Back to our topic at hand, what's different about massage therapy in healthcare settings? I selected this topic because sometimes I do hear some of our colleagues think that healthcare based work is actually just the only difference is the environment that we have to know about, the hospital beds and the, the beeping and things like that.

And all of that of course is true, but I would humbly disagree that environment is the only difference. For me so much about what is different in our work when we're in a healthcare setting is the condition, the physical conditions, the psychosocial spiritual conditions of our clients slash [01:44:00] patients.

And so really knowing about what's happening for them in the process of being a healthcare patient is really part of our assessment. And the more we know about their experience and their conditions and their trajectory and their healing process the better suited we are for the work. And I would submit to you that is the reason for this presentation.

and again, happy to discuss at the end of the, of this the presentation. So as always, it's good to start with a little history.

# The History of Massage Therapy in Healthcare

**Carolyn Tague:** Gail McDonald has written beautifully about the history of massage therapy in general as well as in healthcare specifically.

So these are some of the books that are on my shelf anyway. And I just to give you a little bit of history, obviously we all know in oncology massage that massage has been a healing arts practice for [01:45:00] millennia. It's part of our human right to have, massage and touch and an informed and caring healthcare provider situation.

And massage is, healthcare is not new at all to humanity. As far as the Western and the traditional conventional medicine environments, we can fast forward in our history to when Florence Nightingale started the profession of nursing and included in her instruction were directions for how to offer massage to patients.

And early on in nursing and all the way up through really the 1960s, even early seventies, nurses provided massage therapy in healthcare settings, hospitals in particular as part of their scope of practice. That was, that, the nightly back rub was something that patients could look forward to.[01:46:00]

Late sixties, early seventies, that fell out of favor for a various, wide range of reasons. Nurses are certainly way busy. And so it wasn't long after the absence of massage provided by nurses that the healthcare teams recognized that massage was still very important. And so in the eighties, there are records of many hospitals hiring nurses in particular to provide massage therapy.

So the services started to pop up all over the place. And in the San Francisco area. And this is the first, occurrence of an internship that I'm aware of. There were two folks, and you can see their book here. Massage Therapy Guidelines for Hospital and Home Care by Teddy, Don, and Maryanne Williams.

So this is the lineage from which I come including the Gail McDonald Lineage. But these two women wanna [01:47:00] social worker and one, a nurse decided that massage therapy really needed to be provided and so they were able to pilot massage therapists coming into the hospital to work lovely advance in the field.

They quickly recognized however, that massage therapists. Would need special training to work in hospital settings and work with medically complex patients that wasn't part of their entry level training and experience in education. And Teddy and Marian w started a internship program at a hospital, literally a stone throw from me.

I used to walk to work there myself. And so they started an internship and it was a year long program and they really trained professional massage therapist to work in healthcare settings. And so fast forward [01:48:00] 15 years, I was then one of those interns. Fast forward a couple more years, I was the faculty for that program.

Fast forward a few more years. That program closed and fast forward several more years, six more years. And I was able to bring the program as I am able to to UCSF. And so started at the OSHA Center for Integrative Health and now at the STA Center for pediatric pain, palliative and integrative medicine.

And in there in the middle, what I was able to co-author the Hands in Healthcare textbook that we have here. So anyway, that's probably a little bit too much of the my personal background but a little bit of the history and lineage as it relates to what I'm able to share with you.

So considering the source yeah, and just a shout out to a couple other things. The hospital-based [01:49:00] massage programs review book, their Laura Cox, I believe had the Massage Therapy Network hospital-based massage network for a lot of years and did some great work in collecting data that hasn't been updated since, but.

It's still a lot of our lineage and history. And of course that's Gail's book the first textbook for hospital-based massage therapy. again other of course many other books. Cindy Spence has a lovely book palliative Touch that is about the hospice side of our work. Tracy Walton, of course, all of her great research in pathologies, Ruth Warner, absolutely fantastic sources.

So we have a lot of rich history of a lot of great resources to bring to our work in healthcare settings, whether that's inpatient or in other settings that I [01:50:00] will discuss in a little bit as well. Alright, so let's carry on beyond our. History. And again, what is it, Carolyn, that you're saying makes massage different in healthcare settings?

So yes, the environment is a significant part of what is different. Instead of being in a very well controlled sensory pleasing environment like a treatment room where you're able to have your aromatherapy and the music and the lighting, all of that beautiful environment that we hold dear as massage therapists as part of our healing practice.

Hospitals, healthcare settings, not so much. And so the en environment is different. We do have to contend with things like IV trees that beep and monitors that, have wavy lines all over the [01:51:00] place. We do have to contend with nurses and doctors and physical therapists and everybody else coming in and out of the patient's rooms.

The space is very different. Healthcare settings also have a lot of policies and procedures that are specific to that organization. And again, in our private practice, we can have all kinds of. Guidelines for ourselves about how much time we have for intake what our cancellation policies are, all of that.

But in healthcare settings, we work with the public. We, which means everybody and anybody. And we follow the procedures of the charting, which is

a legal document that shows, what services we provided and how we provided them. We work with orders or referrals from physicians primarily, but maybe also nurses.

So there's really the environment of working as a [01:52:00] team that is very different than private practice or spa practice. the other wonderful places that we get to work, gyms and other settings. And the last thing to say about the environment, I think also is that our scope of practice may be more tightly defined in healthcare settings than in private practice.

for example, I don't know anybody who's bringing hot stones into a hospital room. So there's limitations and there's guidelines and restrictions that are specific to the environment, but to me that's maybe, I don't know, 10% of the difference. What really makes our work different in healthcare settings?

And again, I tend to focus on inpatient work. That's my wheelhouse. But I think this also does translate to places like hospice centers, rehab facilities, skilled [01:53:00] nursing. I. Pt other places where we are seeing medically complex clients and patients. So again, the second column that I have for you here, not maybe my head is in the way.

# Medical Conditions and Contraindications in Hospital Settings

**Carolyn Tague:** But medical conditions of our clients slash patients are really what makes our work in the hospital system very different. So if you recall when you first took an oncology massage foundational class, and maybe it was the first time that you heard about the risk for lymphedema, for example, and maybe you thought, oh gosh, I hope I didn't hurt any of my clients before I knew about this.

So there's things that we need to know when working with patients. In the healthcare system that are above and beyond what we might be expected to know if somebody just, comes to our spa room or our private [01:54:00] practice, right? So the medical conditions, the physiological situations, the treatments, the side effects of those treatments the presenting conditions based on where they are in their illness and their healing journey is what we need to be assessing for and how we base our treatment.

Our treatment planning and then in the environment of the equipment and the policies and procedures and things like that. So I'm gonna talk a little bit more

about the medical conditions that we want to know about. Like we wanna know about oncology for our private practice and other environments.

We wanna know about medical conditions for our hospitalized patients as well. just in general, we are assessing for the risk factors and any contraindications, right? Is there a reason we shouldn't be seeing this patient right now? And then we wanna figure [01:55:00] out what our treatment plan is and what patient outcomes we can work towards.

And so we. I are always trying to meet any side effects. If a patient has pain, anxiety, fatigue, any of that. of those big five, for example, side effects, we're assessing for that. And then we're also looking at how can we induce the parasympathetic nervous system to help induce the healing process, reduce the the anxiety and the stress of the situation.

So these are the kind of big topics, the big headlines of what makes our work different in healthcare settings. In my humble opinion. Okay, let me jump down here. So let's take a little bit more of a closer look at oncology patients and beyond. So the medical conditions of our clients and patients.

So risks and [01:56:00] contraindications in a hospital setting that you would want to be in No, to be aware of, whether it's an oncology patient or a patient who's in a neuro situation. For example, a stroke or perhaps a traumatic brain injury or a spinal cord injury or if somebody had heart attack or heart failure.

So cardiac patients. All of these medical conditions we are assessing for DVT. DVT risk, thrombocytopenia, you know about that from your oncology work. Low platelets. Do they have to have position? Does their head have to be above their heart? Cardiac patients always. Are they a fall risk? Do we have to be careful about whether they are repositioning themselves?

Are there significant changes in their blood pressure as we're working with patients? sometimes a drop in blood pressure is not a good thing with our massage, so we wanna be like [01:57:00] aware. Vital signs, pressure, wounds big risk for hospital patients who have been in the hospital for any length of time.

And so we're assessing for that as all of our oncology patients we're assessing for the risk of lymphedema, or if it's presenting, we're gonna tweak our strategies and neuropathy. Same thing. We wanna know if patients have a history of neuropathy and it can be chemo induced peripheral neuropathy, or it could be neuropathy from diabetes or some other condition.

So we wanna be careful, be as assessing what those reasons are. We also are looking for side effects of any of their conditions. We're assessing for any risks to medical devices.

So not only do we look for ports that we're familiar with in oncology massage, or perhaps even IV lines that are used in outpatient settings. [01:58:00] We may come across patients who have NG tubes. So it's a tube that goes through the nose, down to the stomach for nutrition. There might be oxygen, there might be catheters, folic catheters for urination.

And then in the hospital we can see patients in the ICU where they're actually on ECMO or vemo or LVA ds which is lifesaving equipment. And I'll share a story or two later, I think. In some of those situations and what we can provide. So lots of different medical devices that we are assessing where we can provide treatment and where we cannot.

So those restrictions that we use in oncology, that strategy, that critical thinking process that we use applies to our inpatients. And as the last bullet there points out. So positioning is also something that we're looking at. Can our client be on their [01:59:00] side or not? Again, in the case of cardiology patients, we don't lie them flat, right?

That would be too much backflow. That's the heart is, having issues. So we're, we, they're advised generally not to sleep flat, so we're not gonna put them flat for a massage. And so we go through that, right? There's strategies for addressing the risks and contraindications. And then once all that is set and we're safe and secure with our patients, we look at the indications and what outcomes might we want for any particular patient.

And generally speaking, the overall goal is. In the area of the parasympathetic nervous system, rest, repair, restore. So how do we potentially offer some assistance with anti-inflammatory response? Are we able to reduce stress and anxiety? Can we help somebody fall asleep? Can't tell you how [02:00:00] many times I've had a patient who is not sleeping well and with their 15 or 20 minute massage, I leave them sleeping.

And it's lovely. And family and friends and nurses are just, oh gosh, thanks. I'm so glad they're getting some sleep so we can help with that. And so that's one of the outcomes that we can a address when we see it. Every day. And then of course, symptom management. Can we help reduce pain, nausea with acupressure points, with with positioning, with all of the care, bringing attention away from the stomach, for example, with a foot massage.

So lots of strategies that we can offer our patients who are in the hospital and then not to be overlooked at all. This is a very important part of hospital based and healthcare based. Massage, in my opinion, is the comfort and care aspects. companionship in a [02:01:00] hospital is a thing. Many patients don't have family or friends come to visit.

Whe whether they're too far from home and people can't spend four hours driving to visit in the hospital for an hour or the. Patient simply doesn't have people in their circle that are able to or willing to come to the hospital. So companionship is a significant service that we can provide even in short periods.

All of that has to do with the therapeutic relationship that we're able to. Build with our patients, even if it's a one-time session. I highly advocate for the skills that we can develop to provide a therapeutic relationship with each and every patient that we see. Even if it's just 15 minutes out of a three week stay in the hospital.

So that [02:02:00] is something that is part of our work. And then to me, based on my research and different areas, energy, medicines and and r research on even animal structures and my own kind of observation, the secret sauce, here's the secret, don't miss it. Attention, offer attention to our patients is where I think the.

Kind of the ground of healing lives. And so it's not our intention for them, but it's our attention to them. alright. So let me advance my slide. I think it would be maybe more fun to look at pictures while I'm talking. And so I threw in a bunch of pictures here.

# Case Studies and Practical Applications

**Carolyn Tague:** And maybe I can share a couple of stories, pieces if you will, of how a massage therapists day in the [02:03:00] hospital setting or an infusion center might work.

in the upper left hand corner, you'll see one of our current fellows busy at the computer doing chart work, so reviewing the charts. Checking out what the current situation is, what's happening what kind of procedures might be going on, how the patient is doing. So we do our charting. And in the middle here, this is a photo of a, actually a patient in a bone marrow transplant unit.

I think I can describe that. And this patient is receiving a gentle back massage. You'll notice that we've got them positioned with a pillow in front to hug. You can't see it, but there's a pillow under her top leg so that she can extend out her hip and be a little bit in a stretch so that I can get to more of her back.

So there's definitely strategies [02:04:00] that we use in positioning when we work with our patients. The, let's see, then there's some more fellows from previous year. And just the camaraderie, the team aspect of work in a hospital is much more, I think, than in maybe private practice where you get to collaborate assuming there's other massage therapists with you and it's not a team of one, which often happens.

But maybe your team is the nurses and the docs. And the lower left hand corner, this is actually an infusion center where I'm offering a gentle foot massage while somebody is receiving their chemotherapy. And as you all know, infusions can be 6, 7, 8 hours in a day, so lots of time sitting in the chair.

And so massage therapy is a wonderful addition to the infusion center, but. And then the last photograph there is is a [02:05:00] former fellow and I talking about a poster presentation that we did on some research that we did on massage therapy in the hospital and outcomes. just to mention that in healthcare settings, research studies, pilot programs, all of this, especially in academic world, can be very helpful for the field, can be very fulfilling for us as practitioners.

Lots of learning opportunities and always with the effort to find best practices and evidence to support our work. those are a couple of slides there for that. But I did wanna tell you about a couple cases. What does the work really look like? So I'll just tell you about a couple of people that I've seen this week and maybe one from last week.

'cause I was in the peds infusion last week. So the first case I can tell you about pardon me, [02:06:00] is 55-year-old male who I saw in the ICU. He had, he was on an LVAD, a left ventricular assist device, as well as a trach with a ventilator. So his body, his lungs and his heart were being supported by machinery to keep him alive as he has he is, has heart damage.

And so he's in a, pretty difficult place, but, so he's currently in the ICU with a lot of machines. He does have an NG tube. He has a Foley catheter. Clearly IV for meds and a lot going on, right? So this is what I walked into. And this was a day when I had some fellows observing.

So when we orient to the hospital, the fellows come and watch the work. And so we had some folks observing as well. [02:07:00] And even though all of that was happening for this gentleman and he couldn't speak because of the trach he was able to give a thumbs up or thumbs down. His eyes were clear. He was very present, he was very aware of everything that was happening on awake alert.

And so when we offered massage therapy, it, it was a thumbs up. And to tell you what I offered, I started with a gentle shoulder hug with I, with my hands. Obviously wear masked and gloved and but just the shoulder hug. Did a little bit of , just ever. So light, gentle compressions down his arm, avoiding the tubes, rested my hand on his hand with, another hand at the shoulders.

So just connecting his body in that way through touch. Then also back up with the [02:08:00] shoulder, I was able to use my thumb to just wipe his brow of the tension. And there, it's very normal to have a little. Anxiety tension in the forehead. So I was able to offer that to his forehead.

Also a little hold there back to the shoulder. I laid a very gentle hand on his chest. His body was expanding and there was actually a shake to the body because of the equipment and the machinery. And so I had a very, one hand on his shoulder underneath his shoulder, and the other hand, just ever so gently on his chest, no pressure whatsoever.

I was not on top of tubes, was over his gown on his chest. And honestly, the breathing slow. It's a mechanical breathing, but there was a slowing just an ever so slight slowing and [02:09:00] relaxing. You could feel just. Just a tune in a drop in which was really lovely to be present for. So holding that for a moment, then walking my hands down his legs, went to the other side, did the other side, shoulder, arm legs, and then got to his feet.

And he had dropped in and closed his eyes during a lot of this, and then eyes would open and then drop down and eyes would open. So when I got to his feet, I saw his eyes were open, double check that he would like foot massage. It was okay to take his socks off. I think he was a little bit like, oh, you're not gonna wanna see my feet.

But it was okay. And so I liberally lotioned his feet. And, i, pretty big feet. And I said to him my dad would say, you have a good [02:10:00] understanding. And he didn't miss a beat. He smiled and chuckled. And, and then just dropped back down into relaxing. again, so we did the foot massage, did the other foot, put the socks back on, just a hold.

Went over to him, thanked him for the time and the opportunity to work with him, asked him how he was feeling, thumbs up. And then to cleave, let him know that we would, check in on him again. day in life, right? It's a good gig. It's a nice it's a nice way to, to spend a practice.

And just to point out that. from my perspective to the ability that I was able to, there's the physical comfort, there is the companionship, there is the recognition that he's a human that can maybe laugh. And not just this, poor thing. Tragic [02:11:00] Oh terrible, And to be with all that was in that room, all of the beeps, all of the craziness, all of his, body shakes.

But to be with him and not fixing anything, not changing anything, but just having that attention for him. Yeah. So day in the life, let me tell you, let me tell you another case. So there was another patient that we saw this week, and actually one of the fellows worked on this patient, a 59-year-old female who had an aneurysm, a brain aneurysm.

And so they did emergency surgery and there was not a bone flap, so they had to remove the skull and remove the damaged brain tissue because of the bleed. And so the skin had been, stretched and sewed back up. But there was a significant, like the size of a tennis [02:12:00] ball, significant in the patient's cranium.

I. Not speaking during our session, the notes in the chart said that she had started to say things like yes and no, and starting to try to articulate, but really not verbal with us. Her daughter was in the room and consented said that she, the daughter had been giving massage to her mom, which was so sweet, and we encouraged her to do that gently.

And it was just, it was lovely that she was able to see that as something that could help her mom. so the fellow who was working with this patient checked in, tried to get some, information from the patient as far as pain scale, things like that. And the daughter was helpful with that communication and they decided to do foot massage.

So it was a lovely, gentle [02:13:00] massage. Gave some attention to the legs just to say hello. And there's a pretty flat affect on the patient's face, but eyes were absolutely tracking and watching everything going on. Looked at me, stared at me for a long time, stared at the other practitioner who was there.

really just, again, paying attention to this person who is in a really critical juncture healing. But with the brain aneurysm and the amount of surgery that

she had, she's looking at a really long road of recovery. And we can be there. We can be there in the hospital for her. We can be there in her outpatient care.

We can be with her the rest of her life as far as massage therapy is concerned. it was great to, to be able to work with her. And I whispered to her daughter that she was doing a great job and just really attentive. It was really sweet to see. I think her daughter was like early twenties, [02:14:00] if that.

a lot of family dynamic and a lot of love in that family was really sweet to see. Let's see. One other story I mentioned the pediatric infusion center, right? So not only are we with adults, but pediatric patients very much benefit from massage therapy. And there are hospitals across the country that have lots of massage therapists on staff.

And so it's not unusual. We have a staff at UCSF in our children's hospitals. We also know of lots of other pediatric hospitals that have included massage therapists for a long time. So not new to p It's not something that's, oh, who had ever heard of that? I think, I don't have the stats on it, but there's probably more massage therapists in pediatric hospitals than there are in adult hospitals.

That's my guess. Not a it's an informed guess, but not a statistically verified gets. [02:15:00] In any case, let me tell you about my, my experience with one of our peds infusion center patients. So we were referred to a 15-year-old female who was presenting into the infusion center for her chemotherapy for a relapsing a LL leukemia.

So she had leukemia earlier in her life and there was a short period of remittance and now she had a recurrence. And my understanding is that they were doing chemotherapy to get her prepared for a bone marrow transplant in any case. Lovely young woman. Very pleasant, very. Aware of her surroundings.

Very comfortable. Unfortunately, she's very aware of the infusion centers and hospitals and things like that. But she came with her father and maybe a sister or a [02:16:00] cousin but clearly somebody that was about her age and just a good friend. And so they were in the infusion center together and it was going to be about a six hour infusion from start to finish.

we came in to offer foot massage. Readily accepted. Oh yeah, that's great. And so we're getting ourselves set up. Then the nurse came in and had was ready to administer some of the more of the meds. And we checked, we all checked in, is it okay that we stay with massage? And the patient was like, oh yeah.

And the nurse was like, yeah, please stay. Anything to calm her down. And so yeah, we continued with the foot massage while the patient support was being cleaned. And then medications administered the there's like a plastic. Sticky. It's a protectant. I don't have the tan the term for it that goes over the port when [02:17:00] it's being accessed.

And so it protects it from outside influence. So that was being put on. In all the while the patient and her family were actually playing video games and just like laughing it up and, oh, you did a good one, and, oh, you just killed me, and all that kind of stuff. Which, if there's any good use for video games it might be to be distracted from something like receiving chemotherapy.

So they were having a quality family time. Her physical person was being offered some relaxation and some tension relief and all of that, the nurse was feeling helped that we were there to help keep her calm and hope. And I felt like it, it helped the nurse keep her calm, that we were all in it together, it was okay.

[02:18:00] And yeah, another example of how massage therapy in healthcare might be presenting. All right, now I realize I'm talking and talking, so let me just come through a couple other slides here.

# Opportunities for Massage Therapists in Healthcare

**Carolyn Tague:** Just mention the infusion center's. Integrative health clinics are also.

Opportunities for working as a massage therapist in healthcare settings. So hospitals might have integrative health or integrative medicine clinics that provide massage therapy. So that's not inpatient, but it's an organization within the hospital. Hospice centers and hospice agencies are also generally amiable to massage therapists, cancer centers, as skilled nursing facilities, memory care units.

These are also, I think, great opportunities for massage therapists to provide a service to a specific [02:19:00] population. And then of course many of you are familiar with working in chiropractic offices. Also physical therapists and rehab centers. These are areas where I think there's great potential of growing additional massage therapy.

So PT assistance are sometimes also versed in massage. But it's still not exactly something that's offered a lot. And so again, room for collaboration and I think potential growth for our field. Alright, here's some more pictures for you. The top left. This is one of our fellows this year, and I just, I love this photograph because the patient has his hands open and just, he's just receiving that attention.

And just really we were able to work with him several times before his discharge. So just love that. The middle picture [02:20:00] is an also an infusion center, very much the case I was describing earlier where there's family there and we're able to offer foot massage or other types of work while they're in the infusion.

The upper right is also an infusion center setting. Just getting that foot massage. Neuro, the spastic arm. I'm not sure if you can see that spastic hand of the client I was working with there. This was a actually a volunteer clinic, a volunteer client clinic in a class showing that, there's group therapy that we can offer as well as clinical stuff in class.

And of course, don't forget the staff nurses docs, they can definitely benefit from massage therapy as well as parents and family members.

# Chair Massage for Caregivers at UCSF

**Carolyn Tague:** We have a chair massage for caregivers program at UCSF, and so [02:21:00] parents can come in and get a 15 minute chair massage and it's really lovely. And they just, they so they just breathe.

And it's a great service to offer so. Couple of options there.

# Education for Healthcare-Based Massage Therapists

**Carolyn Tague:** Alright just briefly, education for healthcare based massage therapists. This is my recommendation. Obviously, we wanna start with the S four M foundational courses in oncology. It is the foundation, it is the basic information of.

Critical thinking for how we adjust ForSight pressure positioning. And we can add in some of Tracy Walton's great work with questions about dosing and

duration and the pace of our work. So all of that is absolutely critical. If you can find advanced oncology courses, absolutely jump into those.

In my level two, I go through the protocol for working in infusion centers, [02:22:00] for example. So there are additional classes in oncology that I highly recommend if you can find a hospital-based training. There are, there's, at this point, I think there's a handful spread throughout the country and I've heard of, a couple maybe more coming online.

So keep your eyes out network, talk with folks. You can contact me about where there might be a hospital-based massage training program for you to attend. If you can get into a class, it's highly recommended. And then all of the specialty populations, whether it's elder care, hospice, peds I teach a neuro class.

I teach a end of life class. So there are lots of like population specific courses that if you, you're drawn to it, seek them out, take those classes and then repeat. So information, experience [02:23:00] things change all the time. So don't, please don't think that if you take an oncology class in 2005 that by 2028 you're gonna, I'm good.

I've got it right. So much changes. And so repeat. And I recommend at least, every three or four years five at the most. Just take another foundational course or take an find an advanced course and jump in. So that's my recommendations for education.

# Job Opportunities in Healthcare Massage

**Carolyn Tague:** And then jobs. yeah, this is, these are, we are living in intra interesting times, right?

Normally I talk about the growing nature of our field and how, jobs are opening up and there's more out there at the time of this recording. I don't know. yeah, I dunno what to say.

Traditionally jobs that have been out there [02:24:00] include everything from contractor per diem, part-time, full benefited, all of that. So the whole gamut. And locations, again, integrative medicine clinics, infusion centers, hospice, as well as hospitals for inpatient work.

# Starting a Hospital-Based Massage Program

**Carolyn Tague:** And when I do these presentations, I tend to get questions about how to start a program.

It's a big topic. It's, it's its own presentation, and so happy to revisit that at some point. But you see the bullets here for my recommendations, and again, this is just like a little tease, a little hint about what goes into starting a new program. But if you are drawn to working in a hospital and the hospital near you, do, does not currently have a massage therapy program.

You feel like, yep, you wanna step into this work network, right? Reach out. You can reach out to me or others in our tribe. But these are the [02:25:00] things that, I highly recommend you look at appropriately trained massage therapist. So are you ready to work in the hospital? Who is your internal champion?

Can you start with one unit, one small department within the hospital? And then can you come in with some philanthropic funds to help you get started? And can you identify cops like in real estate? What other hospitals in your area or your state offer massage therapy and can you compare and can you make that argument?

this hospital is doing it. That's really quick.

# Core Competencies for Hospital-Based Massage

**Carolyn Tague:** And then just to summarize my perspective on hospital-based work. Core competencies for working in healthcare include critical thinking skills, excellence in providing appropriately adjusted hands-on massage therapy, which delivers safe and effective sessions, [02:26:00] familiarity with healthcare environments and the cultures and therapeutic relationship skills for being present with medically complex patients, their families, and the healthcare teams.

So I hope this was helpful. I look forward to speaking with you and having your comments and questions as we go forward. Okay. Thanks so much.

# Q&A Session | What's different about massage in a hospital? with Carolyn Tague

**Kelly Jo Webster:** I wanna thank you so much for sharing your knowledge and insights, and experience on what's different about massage in a hospital. I'm excited to get into some of these questions with you. first question is, you had mentioned the environment comfort and the individual's current treatment as considerations for your sessions. Are there other big differences? In your sessions in the healthcare setting compared to more of the [02:27:00] traditional or other places that people practice?

session length, for example.

**Carolyn Tague:** Yeah. Hi. great to meet you Kelly. yeah, thanks for that question. . So, your question was about what's different with the patient.

I just wanna make sure I understand.

**Kelly Jo Webster:** Yeah, just some other different considerations of working in the healthcare setting in addition to knowing their current treatment comfort, and the environment. are there any other differences like for example, the session lengths that you're typically doing with the each patient?

**Carolyn Tague:** Got it, got it. Yeah, so, so the session length tends to be shorter. if a session is 20 to 30 minutes, in my environment, that's pretty typical. There are so many people in and out of a hospital patient room that, it's, it's, it's hard to get in a longer session. Some [02:28:00] hospitals do accommodate a full hour kind of session.

I've often found that that's, very typical. People are too much in and out. And also the medical condition of the patient, it might be too much stimulation and so less can be very much more appropriate, for our inpatients.

**Kelly Jo Webster:** Thank you. And then to piggyback on that, I noticed that many of your pictures and examples given were working on the hands and feet. Is that pretty common for you to work on those areas compared to like a, a, a full body or, all limb sort of situation?

**Carolyn Tague:** Yeah, I mean, it is, it is common to use hands and feet, but it's not exclusive. I, there are many, many times that we'll have patients sideline and they get a full back massage, neck, shoulders, head, [02:29:00] even, low back

legs. So it's not that we don't, work on those areas. might be that the, the significant complexity of a client, like the patient I was referring to in the ICU, there is no way we could get to his back. so it might be more appropriate just to stick with the hands and feet. But again, kind of using the, the acupuncture, and other systems information, it's the microcosm, right? So the hands and the feet are the microcosm of the whole body. And so if you've studied reflexology, you can address points on the body that are, accessed through the foot or the hand, for example.

**Kelly Jo Webster:** Awesome. And then one more question about the whole putting together the, the session for your patients is what type of products do you use, if any, or considerations when thinking about [02:30:00] products?

**Carolyn Tague:** Yeah, no, excellent question. have a policy that we only use hospital provided, lotion. we don't bring in oils. We don't, because the staining on the, the hospital linens would be kind of problematic. and very rarely do we use a patient provided product, they might also not be aware of kind of interactions, from medications or treatments or treatment sites. So we pretty much stick with either no lubrication and work over the clothes or, the hospital provided lotions.

# Challenges for New Massage Therapists in Healthcare

**Kelly Jo Webster:** Another question is, what are some common areas you see massage therapists kind of have a hard time with or struggle when entering, working in a healthcare setting, that transition?

**Carolyn Tague:** Yeah, I mean, and that's a fair [02:31:00] question. and again, why I strongly recommend having, some, some opportunity to orient with. Providers that are already in the system training programs so that you get some, some integration without having to just jump in. that wouldn't be fair to anybody, including you as a practitioner. What typically is hardest at the beginning for new massage therapists in the healthcare environment is really just witnessing the level of, of physical trauma that we can see. to mention the emotional psychosocial stuff that might be happening. and so just kind of the, the complexity of it and the trauma that you can see, I think is hardest for a lot of, a lot of us massage therapists tend to be empathetic people.

We kind of take on that, that, and suffering that we see. And so again, that is part, in my opinion, the, of the [02:32:00] skillset within the therapeutic

relationship where we're skilled at not boundaries that are walls that, we're keeping each other away from, the pain and suffering of others, but holding it in a way that is supportive, attentive, but not taking it on. And, and those are, those are skill sets. and so bringing those into a practitioner's scope I think is most helpful for that kind of initial like, oh my God, what am I looking at? This is so tragic. And, yeah,

**Kelly Jo Webster:** Excellent.

# Starting and Funding a Massage Program

**Kelly Jo Webster:** One question that came through is did your program start? And with that is, are you ac, are you allowed access to the full chart?

**Carolyn Tague:** Oh, yeah. Yeah. We see the entire chart. we, yeah, we read all the notes that are pertinent to us, and we do a chart note. So our work is part [02:33:00] of the medical record, and so the docs, the nurses, PT chaplains, everybody can see our notes as well. and so, as far as how did our program start, I don't give up easily. I, I think it used to be that massage was kind of like, oh, that's not, we're not gonna allow that. And that's not helpful this point, at least in the San Francisco Bay area. When I say massage for hospital patients, the response is like, oh, that's great. They need it. Right? So there's not, there's not a pushback like, oh, what are you doing?

That kind of thing anymore in my experience. So it really does come down to the logistics of who's gonna pay for it. How are you gonna find the practitioners? Where are the practitioners gonna be housed within the hospital system? So what department are they [02:34:00] gonna be hired from? and so it's, it's more the business side of it that is kind of the tricky. and I was fortunate. I was brought in, when I first started at UCSF, I came in through the OSHA Center for Integrative Health. And, I, told my boss when I was being interviewed for the position that when the time was right, I was gonna hit her up for starting an internship for inpatient work.

And she was like, yeah, okay, that's nice honey. but, but the, the time, and, and I pitched it and we found funding and so we just did it. yeah, so,

**Kelly Jo Webster:** Okay, and that leads us into another question is where do you get your funding from for your program?

**Carolyn Tague:** Yeah, no, so it's a little bit of everything. So there is philanthropic, support for, for our program. I have a GoFundMe kind of thing

that U-C-S-F-A lot of [02:35:00] departments and programs within UCSF. We have a, if you get an email from me that the line is in there. so we do take donations directly for supporting, our program. also get some support from a few of the units within the hospital. So, yeah, bone marrow transplant has been super supportive. The infusion centers have been really supportive. and, yeah, there's, so we get support for, for that. And then my home base at UCSF, also because we're an inpatient, service, the, there is, there is capacity to support practitioners having multiple roles. and so their support, that way from the hospital.

**Kelly Jo Webster:** Thank you for that.

# Supporting Clients Post-Hospital Discharge

**Kelly Jo Webster:** Another question is if [02:36:00] a massage therapist is interested in supporting individuals, kind of like within the healthcare system, but not working in the healthcare system, right, because a lot of times people going through treatment or survivorship, and so we kind of see them out in the general public versus in the setting. What is one thing that you would share or suggest with anybody who's interested in working with individuals kind of on this aspect, but not in a healthcare setting?

**Carolyn Tague:** so if I understand the question, so when somebody has been discharged from the hospital, but they have just gone through the work, yeah. So, what's one thing? Huh? I mean, certainly keeping up with your oncology massage training is, [02:37:00] is key. also having, extra time for the intake with your clients so that you really get a sense of how they're doing. because a lot of people will want to say, yeah, I'm fine, know, and get on the table, right? So we do need to ask about how's your platelets, do you have any devices still? Do you have any bruising from where you had an iv? There was a, of my fellows was talking about a patient outpatient. so somebody who had been in the hospital recently and then was seeing her in her private practice, the, the fellow that I was talking about. and the fellow noticed that there was, like the veins were raised on one side and another side, and it was hot and the, the client was complaining about, heat and, [02:38:00] and pain. And, fellow recognized that there was likely a, a, a blood clot or a thrombus. And so told the client about that and yes, the client went and got checked out.

Yes, it was diagnosed. So really having the skill sets to assess, based on knowing what the client went through in the hospital. very helpful. So ask a lot of questions, and have time and set an expectation with your clients who are medically complex that, you know what, since all of this is going on for you

physically, we're gonna take a little bit more time every time I see you to check in. So this is how I work safely and effectively with you. It's not that I'm trying to get you not on the table right away, but I wanna make sure that I understand what's going on. and then just really, know. Assess based on the questions that you, know to [02:39:00] ask.

**Kelly Jo Webster:** That's great. Thank you for that.

# Steps to Start Working in Healthcare Massage

**Kelly Jo Webster:** And then I have another question, kind of similar to like one thing, but what is a step that anyone could take today to really kind of start their journey or experience or exposure to working in, a healthcare setting?

**Carolyn Tague:** So, yeah, and I'm seeing the, the check-in here about, a really detailed intake form. Absolutely agree with that. So with the questions, the form is great, and if they don't wanna fill out the form, ask the questions on your form. So excellent suggestion, Theresa. so one thing that, I mean, it's, it's tricky and, and I have a total bias about this.

As an educator, as somebody who really believes in, in, education for our field, finding courses, finding books, reading the books, taking the courses [02:40:00] is, is really important. wanna have the language, you wanna have the understanding of the acute nature of the clients that you're likely to work with, and the patients that you're working with in a, in a hospital environment or healthcare. So getting yourself the, the content and the, the education is, is really, is really important in my opinion. I know that there are plenty of places, reputable places where folks, had an internal champion perhaps, and, Hey, would you wanna come in and start a program? And they do without maybe a, a lot of background in medically complex clients and patients.

And so then it's kind of like learning on the job. and again, from my perspective, patients should not [02:41:00] be experiments, right? we, we have a, a duty to, to come in with, reasonable education before working on clients. so again, I totally believe that the S four OM foundational courses are significant foundations, right?

So absolutely start there. Keep those up. Go with the additional, advanced classes as best you can.

**Kelly Jo Webster:** I love that. I have another question that just came through. kind of relates to the compensation, for the practitioners in this field. Do you feel that, compensation for the providers will continue to improve and grow as the program shows success and grow in popularity as well?

**Carolyn Tague:** Yeah, I mean, I think that is a very reasonable expectation and, and [02:42:00] it should be that way immediately. I don't think this is something that, we have to grow to. I think it, it should be there now. So in hospital systems, there is, I'm gonna see if I can pull out the term in the HR department, will do a compensation review. There might be another term for it. and what their job is, is to survey the field, locally primarily, but also nationally, to see what, providers with that title, that job title, what they're making, and so that they should be in a reasonable range of that comp, compensation. and so, yeah, that, that should be an expectation immediately. in my opinion, and I, sometimes there's been a history in our field of [02:43:00] volunteering, within healthcare. I know, way back, that was a thing. in my opinion, unless everybody else is volunteering, massage therapists shouldn't be the only volunteers. so there are some clinics in the Bay Area, I'll give a shout out to the Charlotte Maxwell Clinic.

in Oakland, their providers are volunteer, so absolutely massage therapists volunteer there. And it's, it's a wonderful organization and they do great work. if, if it's the massage therapist, that's the only one being asked to volunteer, no. in my opinion, and also a hospital setting, other healthcare settings, in my experience, they actually don't allow volunteers to touch patients. Right? That's a liability, that's a risk factor for the hospital. And so they're gonna avoid that, again, in my experience. So they will rarely [02:44:00] take students, not gonna take volunteers, but are gonna hire, whether that's contractor per diem, full-time, part-time, all of that. in order to have their providers appropriately, to, to work directly with patients.

**Kelly Jo Webster:** Thank you so much for that. I think at this time that is all the questions that, we have. So I just want to thank you for this great presentation and discussion and answering all those questions. everyone please take note that if any other questions come through or if you of anything that you would like to, Ask once we sign off here, please just include that and we can get to those, answering them later. we're gonna take a break now. So enjoy your break

**Ashley Hiatt:** Hi everyone. This is Ashley, one of your Comos. [02:45:00] I'm just going to welcome you all back from break and we will now move into our next presentation and I will bring Erica in as our moderator. Enjoy your session.

# Presentation | Understanding the Lymphatic System – Best Practices for High-Risk Clients with Elizabeth Soto

**Ericka Clinton-1:** Thanks Ashley. Good afternoon everyone. , I would like to welcome you all to our presentation of understanding the lymphatic system, best practices for high risk clients with Elizabeth Soto. Ashley said, I'm Erica Clinton, your moderator for today's session. Please keep any questions you have about the presentation until our q and a portion.

**Elizabeth Soto:** Welcome everyone, and thank you so much for being here today. I'm here today as a licensed massage therapist, but also someone who has seen personally the toll cancer can take. Many of you already have experience providing safe, compassionate care for individuals affected by cancer, [02:46:00] and whether you're offering moments of relief during treatment, restoring comfort after surgery, or simply creating a space where your clients feel safe and cared for, you already know that the touch you provide goes beyond technique.

It holds the potential to calm the nervous system, reduce suffering, and remind a person that they're not alone. Your presence at this conference reflects a commitment to excellence and compassionate service for those going through a very, very difficult journey. And as the mother of a pediatric cancer survivor, I want to say a heartfelt thank you.

I'm profoundly grateful for the work that you do.

# Understanding the Lymphatic System

**Elizabeth Soto:** My session today focuses on working with oncology clients through the lens of the lymphatic system. In that sense, some of what we cover today may serve as a review, but I also hope this session challenges and inspires you to view your work in any way.

I hope it helps you to refine your [02:47:00] approach through a deeper understanding of the lymphatic system as we seek to continually improve the care we provide to our clients.

# Detailed Overview of Lymphatic Functions

**Elizabeth Soto:** So here's what we'll cover. First, we'll highlight important aspects of lymphatic anatomy and physiology. Without going into a detailed explanation of the system, then we'll examine how cancer treatments impact this system. We'll explore how to recognize lymphatic compromise, understand risk factors for dysfunction, and safely adapt your massage or skincare techniques for clients at elevated risk.

Before we go any further, I would like to invite you for a moment of self-reflection.

We each arrive at this work from different backgrounds, varied training, settings, credentials, and lived experiences. Some of us work in clinical environments, others in spas or private studios. Some are part of a collaborative care team and others practice independently. [02:48:00] That diversity means that your scope of practice is unique to only you.

Ethical, effective care goes beyond simply following laws or guidelines. It requires you to know your education, your limits, and your readiness. This self-awareness defines safe practice just as much as the regulations do, and at the same time, cancer itself demands if individualization, as we know, it isn't a single disease, it's many conditions with many paths, each client's journey is different, and so your care must be adaptable and personalized.

Also, my goal today is not so much telling you what to do, but to offer tools, knowledge, and awareness, so that you can make informed, confident choices and define your own practice with clarity and integrity. As we move through today's content, I encourage you to consider what's appropriate for you [02:49:00] in your setting with your skills and within your comfort zone.

Commit to offering that with excellence and trust that what lies beyond your scope may be another practitioner's strength. So here's an illustration to help explain what I'm trying to say. I do a lot of long distance driving, and I used to be a much more aggressive driver. I was always watching for an opening so that I could change lanes and move up in the column of traffic.

And when I do that, I might get there a little faster, and I might even impress my passengers with my advanced driving maneuvers. But it makes for stressful experiences and it prioritizes the process over the people over time. However, I've found that if I just choose a lane that suits me and purposefully staying in it, it frees me up to focus on the entire experience and it makes for a more enjoyable ride [02:50:00] for my passengers who are trusting me to get them where they want to go.

I can then take advantage of the comfort features in my car. I can enjoy a relaxing conversation and spend time being present with my passengers. I can be more aware of their needs and my own, and I can notice a lot more details along the way. So it's not a perfect illustration, but I hope you'll understand my invitation to settle in and enjoy the ride.

And when you do encounter a situation that's outside your scope, take time to pause and assess. I can hear Gail McDonald's voice in my head saying, there is always something we can offer through our knowledge and experience, and especially through our kindness, compassion, and creativity, we can meet each client where they are on their journey and offer them some comfort without compromising their safety or our integrity.

Sometimes when it seems like we are doing less, we are actually [02:51:00] doing more than we know. So let's begin.

For those of us working with clients facing serious health challenges, understanding the lymphatic system is not an optional academic fascination at risk of sounding heavy handed, yes, the pun is intended. I would say it is an an ethical necessity. The lymphatic system is one of the most vital and often underappreciated systems in human physiology.

Whether you're an aesthetician working with the skin or a massage therapist working with muscle and fascia, there's no way around it. You're interacting with the lymphatic system, and so we must engage it knowledgeably and responsibly. What we do can be profoundly therapeutic or unintentionally disruptive, depending on how well we understand what's happening beneath the surface.

So first.

# Lymphatic System Functions and Structure

**Elizabeth Soto:** What does the lymphatic system do? At its [02:52:00] core, the lymphatic system performs four essential tasks, all of which work in concert to support homeostasis and immune defense. Each day, about 20 liters of plasma filter out of the blood capillaries into surrounding tissues, and while approximately 17 liters are reabsorbed directly into the bloodstream, the remaining two to three liters are collected by the lymphatic system.

This fluid includes plasma proteins, cellular debris, and waste. Without this mechanism, tissues would rapidly swell, resulting in edema or in chronic cases lymphedema. The next function is immune surveillance. Lymph serves as a transport highway for immune signaling. It delivers pathogens, antigens, and abnormal cells to the lymph nodes where lymphocytes, macrophages, and other immune cells mount a response.

This function becomes especially important in oncology care where immune systems may be [02:53:00] compromised or lymph nodes have been surgically removed or irradiated beyond fluid recovery, the lymphatic system removes what the venous system cannot. This includes excess proteins, inflammatory molecules, and large cellular byproducts that are too big for the venous system.

This makes it a key player in post-traumatic post-surgical or post chemotherapy recovery where tissues are metabolically stressed and finally specialized Lymphatic vessels in the intestinal lining called lacteals absorb dietary fats and fat soluble vitamins. These nutrients are carried as Kyle, a limp lipid rich lymph through the thoracic duct and into the bloodstream.

Dysfunction here can cause nutritional problems.

# Lymphatic System Anatomy

**Elizabeth Soto:** So now that we've explored what the lymphatic system does, let's look at how it's built, because the structure of the [02:54:00] system plays a central role in how we approach touch base care.

The lymphatic system is a one-way drainage network that parallels the circulatory system. It transports lymph from the interstitial space back into the bloodstream, ultimately emptying into the subclavian veins. Key anatomical components include lymphatic capillaries. These are blind ended micro vessels that are embedded in nearly every tissue and are especially concentrated in the dermis and superficial subcutaneous layers.

They feature flap like endothelial junctions that open when the interstitial pre, when the interstitial pressure increases, allowing fluid to enter, and then there are collecting vessels and valves. Lymph flows into larger vessels equipped with one-way valves from the capillaries. These vessels don't contract spontaneously like blood vessels.

Instead, they depend on external [02:55:00] mechanical forces to wrap fluid into them, such as muscle contractions, joint movement, deep breathing, peristalsis, and manual techniques, including a massage and skin stretch. Now, if you've ever observed a pool skimmer in operation, this is what I imagine them to be like.

Collecting vessels can withstand slightly more pressure than initial capillaries, but are still vulnerable to compression studies. Using lymphocy and Doppler imaging show that external compression greater than 30 or 40 millimeters of mercury can significantly reduce lymphatic transport in both healthy and compromised limbs.

In lymphedema patients, the collecting vessels are already under stress weaker, less rhythmic, and more prone to collapse or backflow. And then we have lymph nodes, roughly 600 to 700 distributed throughout [02:56:00] the body, clustered in strategic regions like the neck, xxii, abdomen, and groin, they act as biological fi, biological filters, intercepting pathogens and abnormal cells before lymph reenters the bloodstream, surgical removal or radiation in induced fibrosis can alter drainage pathways in the body,

and then the lymph is eventually funneled into larger chunks than into two main ducks. The thoracic duct drains the lower body, left arm, and left side of the head and chest emptying into the left subclavian vein, the right lymphatic duct, and also the right upper quadrant draining into the right subclavian vein.

Peripheral lymphatics include the superficial capillaries and vessels found in the skin limb soft tissues. These are the areas we most frequently engage as massage therapists and estheticians, and they're highly responsive to our techniques. [02:57:00] Central lymphatics refer to the deeper trunks and ducts that collect that collect limb from the entire body and return it to the bloodstream.

Obstruction here can cause widespread systemic fluid retention and is more medically complex.

So one of the most important and often misunderstood characteristics of the lymphatic system is that it is both slow moving and passive. This design makes it efficient under normal conditions, but also uniquely vulnerable when the system is stressed at rest. Lymph flows at a rate of just one to two milliliters per minute, which is glacial compared to blood circulation, which completes a full circuit in under a minute.

The slowness is by design. It allows lymph time to be filtered by nodes, scanned by immune cells, and processed for safe return to the bloodstream. But it also means the system is [02:58:00] easily overwhelmed, especially when faced with increased interstitial fluid from inflammation or trauma or blocked or removed lymph nodes.

Fibrosis from surgery or radiation, systemic illness or immune compromise. The lymphatic system typically, typically returns two to three liters of fluid per day to the bloodstream, which is about the volume of three soda bottles. There is some capacity for higher lymph loads, but if a portion of the system is damaged, the remaining vessels must compensate.

Often under high mechanical and immunological stress, if the load exceeds capacity, tissues begin to swell and will begins as a transient edema and evolve into chronic lymphedema of left unmanaged. Even in healthy individuals, things like prolonged immobility, dehydration, or tight clothing can impede lymph flow for vulnerable clients, small [02:59:00] disruptions or poorly chosen techniques, and tip the balance into dysfunction.

As you can see from this table, lymphatic structures are most prevalent in the areas in which we work. The only area where there are no lymphatics would be the epidermis. However, the epidermis contains liger han cells, and when the epidermis is a braided or irritated, even superficially, it can trigger.

It can trigger a local immune surveillance response. And longhand cells lcs are among the first to respond. They activate and cross the basement membrane migrating into the germal lymphatic capillaries. This in turn increases lymphatic traffic and fluid turnover in the local tissue, potentially triggering inflammation in conditions like psoriasis or eczema.

Repeated [03:00:00] activation of LCS leads to lymphatic congestion or hyperresponsiveness. Potentially exacerbating local edema or lymphedema risk.

Emergent research is now validating what many experienced oncology body workers have long observed. Anecdotally, when it comes to supporting the lymphatic system, less is often more.

# Lymphatic System and Massage Techniques

**Elizabeth Soto:** One of the most significant breakthroughs in visualizing real time lymphatic function has come from ICG lymph, a technique that uses endocytic green dye, injected intradermally, and then illuminated with near infrared light.

This high resolution imaging technique allows us to see lymph flow in real time beneath the skin. In 2019, LA Meyer conducted a pivotal study that provides compelling visual evidence of how the lymphatic system responds to gentle low pressure manual input. [03:01:00] Researchers were able to observe congested germal zones of lymph stagnation due to damage or obstructed vessels, such as is commonly found in clients post-cancer treatment.

And they produced visual evidence in real time. That manual lymphatic drainage techniques visibly increased lymphatic activity and the movement of the ICGD redirecting it to healthier I healthier areas. This confirms that even light touch when performed with educated intent can stimulate flow and encourage compensatory rerouting through nearby functioning lymphatic vessels, bypassing the damaged regions altogether.

This isn't just a fascinating research finding, it's a clinical game changer. It confirms that the lymphatic system is not stimulated by force, but by finesse. It responds best to sub-threshold. Skin stretch level [03:02:00] stimulation, which aligns directly with the modifications many of you are already making in your oncology work.

Why a simple touch makes a big difference. Lymphatic capillaries form an intricate network just beneath the skin surface. Some researchers estimate that potentially over 70% of the lymphatic network lives superficially in the dermis and superficial fascia. These capillaries can be as shallow as a 10th to one millimeter deep, making them remarkably accessible to even gentle touch.

And these initial in lymphatics are specifically designed to absorb fluid. They're made up of a single layer of overlapping endothelial cells that act like tiny one-way doors. These cells respond to even subtle changes in pressure within the

surrounding tissue. Anchoring filaments, connect them to the surrounding [03:03:00] matrix.

So when the tissue is gently stretched by swelling movement or skilled touch, these guy wires pull open micro gaps between the cells, allowing fluid proteins and immune cells to enter the lymph system. In practice, it takes very little pressure to activate the system, so what that would feel like might be the weight of a large potato sitting on your forearm.

I realize this is not something we do every day, but it's something that's easy to visualize and imagine. Even this minimal contact can promote lymphatic uptake. It can reduce stagnation and encourage tissue healing, which is especially beneficial in cases of congestion, inflammation, and post-op swelling.

I've included this diagram for the job's website that helps show how intertwined the lymphatic system is. The caption at the bottom reads simplified [03:04:00] diagram of the most important anatomical areas. So what does this mean for practitioners? Well, many of us have questioned whether light touch can really be therapeutic, especially when clients equate deeper work with deeper results.

But the research makes it clear. Gentle, rhythmic techniques are not just relaxing, they're physiologically active, especially when it comes to the lymphatic system. Gentle informed techniques and facilitate lymph flow, but careless pressure can impair it. So con, consider this. It only takes 30 millimeters of mercury of pressure, the equivalent of moderate massage depth to collapse healthy initial lymphatic capillaries, more than 60 millimeters of mercury as seen in deep tissue work.

May obstruct collecting vessels and can traumatize already fragile tissue after cancer treatment or trauma when deeper [03:05:00] lymphatic collectors may be impaired. The superficial lymphatics, the ones located in the, in the dermis and sub dermis, these must compensate. These vessels are delicate, but they respond best to skin traction, light, and precise contact between zero and 10 millimeters of mercury and slow rhythmic pacing.

So it's best to use light, intentional pressure work approximately to distally. Avoid reding the skin, avoid deep or vigorous techniques in regions that are already congested or overburdened. In compromised tissue. This can provoke inflammation or worsen lymphatic stagnation. And we need to be alert to early signs of impaired lymph flow, which may appear before swelling becomes obvious.

It is important to stay within your scope. However, [03:06:00] you may not be diagnosing or treating lymphedema, but you are uniquely positioned literally to observe subtle changes, modify your techniques, and refer appropriately. Early recognition and adaptation can go a long way to prevent progression to more serious complications.

So it's a good idea to collaborate with other professionals when needed either for impression or MLD referrals.

Every session is an opportunity to support the body's fluid environment while minimizing the potential for harm. As you adapt your techniques with an awareness of the underlying lymphatic system, you're not only helping your client feel more comfortable, you're also promoting gentle physiological support for a system that may be quietly struggling just beneath the surface.

Now, this chart shows the different levels of [03:07:00] pressure and the effect on the lymphatic system In our patient population, level one is going to be the most effective. Tracy Walton defines level one pressure as the amount used to spread lotion on the skin without causing the tissue to indent. It should not engage fascia or muscle layers.

Gail McDonald refers to the metaphor of handling a right peach without bruising it.

# Lymphedema: Causes and Stages

**Elizabeth Soto:** So why do you need to know about lymphedema? Lymphedema is a chronic swelling disorder caused by impaired lymphatic transport, and while it's often associated with limb swelling after cancer treatment, it can also affect the chest wall, breast, abdomen, genitals, head or neck, depending on where the lymphatic system has been disrupted.

Surprisingly, there's no single globally [03:08:00] accepted definition of lymphedema. It varies by region, discipline, or diagnostic system. This means a vascular surgeon may define lymphedema based on limb circumference. A rehab specialist might use bio impedance spectroscopy or tissue endometry. A dermatologist may focus on skin changes or fibrosis.

And in Europe. Lymph is more commonly used. But in in the US here, many practitioners rely on clinical observation. Some systems require visible swelling for a diagnosis. Others include subclinical lymphatic dysfunction before swelling is visible. Fortunately, we don't need to diagnose it. However, as

practitioners who touch and observe the body every day, we can play a part in recognizing early changes, working safely and referring appropriately when something doesn't feel [03:09:00] right.

So what actually happens in lymphedema, we can write, we can recognize it better if we understand what's happening. When the lymphatic system is damaged or overwhelmed, it can no longer effectively transport lymph lymphedema. Is more than swelling. It's a complex response involving fluid overload, immune activation, and tissue remodeling.

When lymph can't be cleared efficiently, a protein-rich fluid accumulates in the tissues. These proteins then attract and sustain inflammation. And over time this leads to fibrosis where healthy tissue becomes dense, less elect, less elastic, and more prone to breakdown. Unlike standard water weight swelling, this is a slow, sticky inflammatory process and it often starts long before visible signs appear.

[03:10:00] And here's what's critical to remember. Secondary lymphedema can occur weeks, months, or even decades after treatment. The risk is lifelong, and so our vigilance must be also,

so here the stages of lymphedema. Stage zero is the latent or subclinical stage. Lymphedema often develops quietly and gradually long before there's visible swelling. Tissue may already be changing beneath the surface. Research shows us that up to 30% more fluid can be present in tissues before swelling becomes noticeable.

And by that point, the lymphatic system may have already lost 20 to 40% of its transport capacity. And that's why what the client feels or you feel. Matters. A subtle thickening, a change in skin tone, reduced elasticity or asymmetry can be [03:11:00] the first clinical clue. So I would like to come back to this stage and talk more extensively about it, but let's proceed through the other stages.

First stage one is reversible lymphedema. What's happening is fluid accumulation and swelling becomes visible. The client may report mild swelling, especially at the end of the day or after activity, hitting edemas present, but may resolve with elevation or overnight the skin is shiny or stretched. Stage two is spontaneously irreversible lymphedema.

Chronic inflammation drives fibrosis, and there's an increase in fibroblast activity and collagen buildup. The tissues become fibrotic, thickened, less responsive. More vulnerable to injury. Clients may report persistent swelling

that, no, not that no longer pits easily, they have stiffness or discomfort with movement.

The tissue may feel thickened, firm or leathery. [03:12:00] And why this matters for us is we need to avoid deep or targeted pressure in the effective area. We need to check for skin fragility. There will be dryness, flaking, and sensitivity. it's important to ref, refer for specialized care and co-manage with a certified lymphedema therapist.

In stage three, this is lymphatic entasis. What's happening is severe chronic lymph stasis with widespread fibrosis, there's immune dysfunction, tissue overgrowth, papillo, thick folds, a keratosis. Clients may present with significant disfigurement, frequent infections, and skin breakdown. Do not treat affected areas unless you're specifically trained or cleared to do so.

But do offer emotional and physical support to unaffected areas. [03:13:00] Encourage multidisciplinary care and medical follow up for these clients. So this is an overview of all the stages.

# Recognizing Early Signs of Lymphedema

**Elizabeth Soto:** And now I would like to go back to the hidden early stage because this is what your hands may notice first in this earliest preclinical phase, the lymphatic transport system is already compromised, but it's not yet overwhelmed.

Fluid is beginning to build, but it's not visible. Protein-rich lymph begins to accumulate. Fibrosis can start forming beneath the surface. Even though the skin may look completely normal, there's no visible swelling, but there are signs and practitioners who work directly with soft tissue may be the first to see or feel subtle signs, especially in these areas where clients can't view themselves easily, like under the arms, behind the knee, or at the back of the torso.

What feels like a [03:14:00] small localized tissue change to your hands may be the earliest sign of a lifelong condition, A subtle firmness in the wrist or a dry patch near the ankle, or a sense that one side of the body just feels different, may be the earliest indicator of a chronic condition developing. These aren't diagnoses.

These are insights that you can provide. Changes in texture, tone, tissue, mobility. They often speak before the client notices. When you notice something that doesn't feel typical and you share that observation carefully, you

may be the one who helps catch something early. Recognizing is not diagnosing. It doesn't mean that you're telling them what they have, but it means documenting, modifying your approach and referring if the science persist or progress.

# Common Symptoms and Red Flags

**Elizabeth Soto:** So here's some common symptoms that may indicate lymphatic overload. The client may come in [03:15:00] and report a heaviness of fullness or an aching and a limb or a specific region. They might notice that clothing or jewelry is tight. They might say one side of their body just feels different. They can complain of a vague discomfort without a really clear source.

As a practitioner, you may observe mild puffiness or asymmetry. A slower rebound when pressing the skin. Reduce skin mobility, it's harder to lift or tempt the skin. Slight thickening, maybe dryness changes in how tissue texture feels under your hands, and often decreased range of motion near a joint.

Lymphedema often begins in the hand or foot and progresses toward the trunk. So a subtle fullness in a wrist or ankle may be your earliest clue. And specifically, watch for these areas because following head and neck cancer, clients may report puffiness [03:16:00] around the eyes or jaw, throat tightness, or mild difficulty swallowing, or some subtle fullness that they perceive as cosmetic.

But these may be early signs of lymphatic congestion. Up to 75% of clients receiving combined surgery and radiation in this region develop some form of lymphedema, either external or internal. In breast cancer survivors swelling can arise in the chest or the underarm under the breast folder within the breast itself.

And this can happen years after the treatment has ended. So what should raise a red flag? One-sided swelling, especially if there's a history of node removal or radiation, persistent tissue changes that don't resolve or that progress subtly over time. And new limitations in skin or joint mobility without a musculoskeletal cause if you notice these, [03:17:00] pause, adapt your approach and recommend a medical consult or referral.

, So now we get to talk about common causes and mechanisms of lymphatic dysfunction.

# Factors Compromising the Lymphatic System

**Elizabeth Soto:** As we have seen, the lymphatic system is both complex and delicate. It can be compromised by a wide range of factors including infection, trauma, chronic inflammation, venous insufficiency, obesity and prolonged immobility.

Even environmental exposures and occupational demands can take a, can take a toll. First responders, military personnel, and others in high impact professions may feed, may face repeated injuries, toxic exposures or infections, and these place them at elevated risk for lymphedema, unrelated to cancer.

Sometimes the disruption is [03:18:00] sudden. Other times it's cumulative, a slow buildup over months or even years, often going unnoticed until the system reaches a tipping point. Your client may face only one of these factors, or they may have encountered multiple cumulative challenges to the lymphatic system.

# Lymph Node Removal and Its Consequences

**Elizabeth Soto:** Lymph node removal is a very common part of cancer treatment, whether done for staging, biopsy, or treatment itself. It is. One of the most significant risk factors for secondary lymph edema. Once nodes are removed or damaged, the body's ability to drain fluid from the associated region is reduced, often permanently.

Lymphedema can develop in any area where lymphatic drainage has been disrupted. It's not limited to arms or legs, and it doesn't always show up immediately.

# Surgical Regions and Lymphedema Risk

**Elizabeth Soto:** So here's [03:19:00] are some common surgical regions where lymph node removal leads to an elevated risk of regional lymphedema. These patterns, like I said, can show up months or even years after surgery, and they may not, they may not be recognized by the client as lymphatic in origin.

So pelvic or groin node removal can lead to leg, lower abdominal or genital swelling, which is common after a gynecological. Prostate or melanoma surgeries. Neck node dissection may result in facial submental or cervical swelling, which is common after head and neck cancers. Accelerate.

Dissection may cause arm, breast, chest wall swelling after breast cancer, and something that is often overlooked is chest or abdominal surgeries may result in trunk or breast lymphedema. [03:20:00]

# Understanding Lymphatic System Disruptions

**Elizabeth Soto:** Even the removal of just one node can permanently change how the lymphatic and immune systems function. Think of the lymphatic system as a network of highways.

Lymphatic vessels are the roads carrying traffic in the form of fluid waste. Immune cells and lymph nodes are like checkpoints or guard stations filtering that traffic, detecting pathogens and identifying abnormal cells like cancer cells. Imagine what happens when a checkpoint closes, such as when a node is removed, whether for biopsy or treatment, the traffic doesn't disappear.

It must reroute nearby vessels and nodes are forced to take on the extra load. The result, detours, congestion, possibly system fatigue. And if you add in scar tissue, radiation, infection, or chronic inflammation, then we are describing a system where the burden may become greater [03:21:00] than what extra capacity the system can support.

And as a result, as a result, those detours themselves fail. At that point, lymph fluid begins to back up accumulating faster than the system can clear it. This is the tipping point where swelling becomes visible, tissue changes develop and lymphedema may begin to manifest. Even in cases where only one or two nodes are removed, such as with sentinel node biopsy, the risk of this developing isn't zero as was once believed.

And there's also another very important impact to the entire system too. One that's often overlooked. Lymph nodes aren't just fluid filters, their immune surveillance hubs. When a node is removed, immune detection in that region is reduced. That means a higher risk of infection, slower healing, and less immune defense.

[03:22:00] And then aside from lymph node removal, any cancer surgery that removes or disrupts lymph nodes or vessels can com can compromise lymphatic drainage in that region. Scar tissue, even without node removal, can mechanically block cord divert lymphatic vessels, creating bottlenecks and misdirected flow.

Things like transverse abdominal scars from C-sections or gynecologic surgery, chest wall scars after mastectomy. These can all change the, the drainage pattern swelling that persists more than three months after surgery is no longer considered normal post-op edema. It's chronic and it likely has a lymphatic component.

# Radiation Therapy and Fibrosis

**Elizabeth Soto:** So here we have radiation therapy and fibrosis. Radiation therapy is one of the most effective tools in cancer treatment, but it comes with significant trade-offs and often evidence of that cost [03:23:00] is delayed. One of the most under-recognized long-term complications is radiation induced fibrosis, a progressive, often invisible process that quietly changes soft tissues from the inside out.

Unlike scar tissue from a visible injury or a surgical incision, radiation fibrosis doesn't always have an external marker. It occurs deep within the affected area. Collagen builds up excessively in the scan fascia, lymphatic pathways, and connective tissue. Often months or years after the the, after the therapy has ended.

And over time, these disorganized collagen fibers become cross-linked. Think of it like deeply intertwined shrink wrap tightening. Over time, the tissues become dense, inelastic, less compliant, and as a result, lymphatic channels can become compressed or possibly obliterated. [03:24:00] Range of motion may gradually decline even without a clear injury, and the swelling may also be delayed, absent, or misattributed to other causes.

Even with today's highly targeted radiation protocols, fibrosis remains a documented late effect, especially in breast, head and neck, pelvic and gynecological cancers. It's not that the radiation technique is poor, it's a biological response to the chronic tissue injury that is radiation therapy.

# Chemotherapy's Impact on the Lymphatic System

**Elizabeth Soto:** Chemotherapy is one of the most physically and emotionally demanding phases of cancer treatment, and as massage therapists and estheticians were often supporting clients who are currently undergoing chemo or who completed it years ago, but still feel the effects. It's important to understand that [03:25:00] chemotherapy doesn't just target cancer cells, it affects the entire body, including the lymphatic system, skin, nervous system, and immune response.

Long after the initial infusion, clients may experience fatigue, swelling, fragility, or altered sensation. Reasons for this. Number one, fluid retention and capillary leak. Chemotherapy drugs often come with corticosteroids like dexamethasone, which can lead to fluid retention, especially in the face, abdomen, and limbs.

Certain chemo agents may cause capillary leak syndrome where fluids shift from blood vessels into the tissues. This increases lymphatic load. It can overwhelm drainage capacity and may trigger or worsen lymphedema. You might see subtle puffiness or delayed swelling, and it often doesn't present symmetrically.

There's tissue [03:26:00] fragility and bruising. Hand foot syndrome is a skin toxicity reaction caused by certain chemotherapy drugs. HFS occurs because chemotherapy drugs leak into capillaries and accumulate in the skin, especially in high pressure. High friction areas like hands and feet. These areas have dense capillary beds and sweat glands, both of which can trap and concentrate the cytotoxic agents.

Low platelet counts and damaged capillaries also mean clients bruise easily, often from minimal pressure. Their skin may be thin, dry, or hypersensitive, especially in irradiated or chronically stressed areas. Infusion and quar sites may also leave scarred or fragile veins. Chemotherapy also sus suppresses white blood cells, especially neutrophils.

This immunosuppression means that even small skin disruptions [03:27:00] can lead to very to very serious infections like cellulitis, especially when. Protein rich lymph stagnates. So it's important to watch for signs of infection, pain, redness, warmth, swelling, fever. Immediate referral is essential if any of these symptoms appear.

And finally, there's peripheral neuropathy. Agents like taxanes and platinum compounds like cisplatin can cause peripheral neuropathy, which often presents as numbness, tingling, burning, hands and needles, especially in the hands and feet. And this is important because clients may not perceive pressure accurately as a result.

They also might not know until after the session that something was too much.

# Other Causes of Lymphatic Dysfunction

**Elizabeth Soto:** Most clients dealing with medical issues rarely have just one diagnosis. Cancer may be the focus, but it's often not the [03:28:00] only thing affecting their lymphatic system. Swelling can come from many places and sometimes. A client was born with a lymph system that's always struggled, so that's why it's important to look at the whole person.

Understanding these other causes of lymphatic dysfunction helps you offer safer support and helps you to know when to adapt, refer, or simply listen. So let's explore what else might be going on beneath the surface Trauma includes not only injuries and accidents, but also non-cancer related surgeries, like joint replacements of abdominal procedures or cosmetic operations. These can disrupt lymphatic flow when local lymph vessels are damaged or removed, especially if there's extensive scarring. Infections are another important factor.

When the body fights infection, lymphatic vessels can become inflamed. And if that inflammation is recurrent or prolonged, it can cause lasting structural damage and [03:29:00] impair the lymphatic system's ability to transport fluid efficiently. So even without a cancer diagnosis, individuals can experience chronic swelling, tissue stiffness, and immune dysfunction, especially if these issues go unrecognized for these reasons.

A thorough history and careful observation are so important when working with at-risk clients. Other causes, vascular causes. Sometimes the issue isn't the lymphatic system itself, but what's happening in the veins nearby when blood isn't moving efficiently back toward the heart, whether it's from faulty valves, varicose veins, or compression, it builds up in the tissues and this extra pressure can overwhelm the lymph system, creating a type of swelling called.

Lymphedema.

The autoimmune system

can also cause problems, rheumatoid arthritis, lupus, scleroderma, where the immune [03:30:00] system mistakenly targets the body's own tissues. This chronic inflammation doesn't just affect joints or skin. It can also damage lymphatic vessels and nodes over time. As inflammation flares up again and again, the affected tissues swell Arden and become less responsive to fluid movement.

Prolonged inflammatory edema can invo, can evolve into fibrotic. Lymphedema. You might notice puffiness in one area that doesn't quite match the typical lymphedema patterns, like a single swollen joint or fibrotic patches of skin that feel firm to the touch. I. These immune driven conditions can quietly wear down the lymph system, creating a kind of long-term traffic jam for fluid.

The lymphatic system doesn't have its own pump like the heart. It relies on the rhythm of muscles, joints, and breath to keep things flowing.

# Understanding the Lymphatic System and Its Challenges

**Elizabeth Soto:** So when movement is limited or missing, whether from [03:31:00] paralysis, prolonged bedrest, or simply being sedentary, the lymph system struggles to do its job. In these cases, you might notice swelling in the hands or feet.

That's more pronounced at the end of the day, especially in clients who use wheelchairs or have had a stroke. This highlights how important even small, everyday movements are in keeping fluid moving and tissues healthy.

# Impact of Weight and Adipose Tissue on Lymphatic Function

**Elizabeth Soto:** Carrying additional weight can also influ influence how the lymphatic system functions. Adipose tissue can physically press on lymph vessels and crowd lymphatic pathways making fluid movement more difficult. Additionally, it's now understood that adipose tissue is metabolically active. It can produce inflammatory signals that place additional stress on [03:32:00] the body's fluid reg regulation systems, and as a result, swelling may appear in multiple areas of the body, most commonly in the lower limbs, and they may feel thicker, denser, or more fibrotic to the touch.

# Recognizing and Addressing Swelling and Lymphatic Congestion

**Elizabeth Soto:** Unfortunately, this type of swelling often goes unrecognized for what it is. Sometimes it's mistaken as excess weight when there may be underlying lymphatic congestion or early dysfunction. Understanding these patterns allows us to approach clients with greater insight and sensitivity, and it reminds us that lymphatic congestion can look very different from person to person.

Not all swelling starts in the arms or legs. Sometimes it begins deep within the body linked to function of organs like heart, kidneys, or liver. These cases can look different from typical lymphedema, but they still affect the lymph system. Heart [03:33:00] failure and slow down circulation usually in the legs and feet and fluid backs up.

Swelling tends to worsen as the day goes on and might come with fatigue or shortness of breath. Kidney disease can, can cause widespread puffiness, especially around the eyes, hands, and belly because the kidneys aren't filtering and balancing fluid like they should. Liver disease, especially in its advanced stages, can lead to swelling in the legs and abdomen as fluid builds up due to increased abdominal pressure and reduced protein levels in the blood and central lymphatic obstruction where the main drainage pathways like the, like the thoracic duct are blocked or malformed can lead to swelling in unusual places like the face, arms, legs, and trunk, all at once.

These types of swelling usually signal something deeper while not all of them are treatable through body work. Being able to recognize when [03:34:00] something doesn't fit the usual picture helps us guide patients safely and while most lymphedema we see. Is secondary.

# Primary Lymphedema: Causes and Misdiagnosis

**Elizabeth Soto:** Some clients are born with a lymphatic system that's underdeveloped or doesn't work properly, and this is known as primary lymphedema.

It's usually genetic or congenital, meaning it's present at birth or develops without a clear external cause. The underlying issue is usually the body simply

doesn't have enough lymphatic vessels, or the ones that exist may be too narrow, missing valves or poorly formed. Primary lymphedema often starts in childhood or young adulthood, usually in the lower legs.

Swelling may begin subtly a puffy ankle after a long day and progress over time. Many people live with it for years without a name for what's happening. It's often MI misdiagnosed as fluid retention or [03:35:00] weight gain. This condition. Can be unmasked or made worse by cancer treatment, especially if lymph nodes were removed or damaged.

It's important to recognize that these clients have had a lifelong challenge, even if it's only now being noticed. I epha, I emphasize this specifically because in our professions, our practice spaces may be the first place where these clients finally feel seen and heard.

# Adapting Massage Techniques for Lymphatic Health

**Elizabeth Soto:** So how do we adapt our touch to meet the needs of these medically complex clients?

Safe practice is not one size fits all. As we know, oncology massage is not a set of techniques. It's a framework of critical clinical decision decision making that takes into account the unique medical history and treatment journey of each client, the long-term systemic impacts of [03:36:00] cancer therapies. The capacity of gentle touch to alleviate distress without increasing risk.

It's essential to undergo training that informs these decisions and to keep up with new knowledge as it becomes available. We've come a long way, but there is always something new to learn. As Gail McDonald reminds us, the most robust of clients must modify their activities during treatment and recovery.

Even clients who feel fine are physiological physiologically fragile. So if clients should modify their activities, we would do well to modify our approach to support their wellbeing also.

So as we prepare for a session, we want to consider the following.

# Safe Practices and Techniques for Oncology Massage

**Elizabeth Soto:** For pressure, we want to use superficial, rhythmic, non friction based [03:37:00] techniques. Avoid aggressive techniques and treatments that cause damage that can compress or shear the tissue. So needing Petra massage, deep friction, percussive tools, skin stretching, pin and stretch.

We want to emphasize gliding strokes such as effleurage or static contact with intentional pause, touch, should invite, not demand, and even when a client requests deeper pressure, it is our responsibility to explain the physiological risks and advocate for a lighter, safer approach. When considering the site, we want to know the tumor sites or known malignancies, radiated areas, lymph node dissections.

Where are the scars, the surgical incisions, the medical devices, quarts, bone metastases, [03:38:00] and osteoporosis. Consider where there's lymphedema, swelling, and also neuropathy. And finally, cancer treatment fatigue or surgery may impact a client's ability to lie prone or supine comfortably. So allow for them to shift and make sure that you prioritize comfort and ease of breathing.

Whatever bolsters, pillows, wedges, or sideline positions you have available you can make those available and offer modifications that make them more comfortable. Consider lymphedema or pro surgical drainage. Also, when you're choosing elevation, you might want to raise the arms or legs for comfort.

Also avoid compressing lymph node beds. So do not position a client on their affected axilla or groin. Allow clients to reposition [03:39:00] as needed during the session if fatigue or discomfort sets in.

# Understanding Lymphatic Drainage Patterns and Techniques

**Elizabeth Soto:** And then during the session, it's important to have a map before applying any hands-on technique. Visualize the lymphatic landscape. I've included depictions of the lymphatic system throughout this presentation to help you picture what it is we're working with. And here I borrowed an image from the job website resources section.

If you're wondering, the red area indicates anastomosis, but that is outside the scope of this talk. However, everyone should know the superficial lymphatic territories, the watersheds, and how they interconnect. Understand the drainage patterns and how they must change when lymph nodes have been removed or irradiated, and be alert to areas of fibrosis, surgical scarring, and [03:40:00] anatomical rerouting, including when implanted devices alter the, the expected flow.

So a mental map of lymphatic drainage patterns is essential for avoiding inadvertent overload of the system. And traditionally, body work flows toward the heart, but when lymph nodes or pathways have been altered by cancer treatment, this may be inappropriate strokes toward the heart may push fluid toward a compromised lymph node bed.

So redirect fluid away from compromised quadrants and favor. Movement toward healthy, intact node regions, but only do this within your scope. If you are properly trained, use shorter stroke lengths and avoid over repetition in one area. In classical massage, the traditional recommendation is to work from distal [03:41:00] to proximal toward the heart, and the goal is to assist venous return in lymphatic flow.

But for clients with known or potential lymphatic disruption, working proximal to distal is recommended. It clears the central lymphatic pathways first, it reduces the possibility of back pressure, and it prepares the nervous system because gentle proximal work can help reduce sympathetic tone, also reduce the duration In fragile lymphatic systems, more time does not equal better outcomes.

Take time. To observe the tissue response. Watch for signs of congestion, color change, fatigue, or heat. Allow time between sessions for recovery, especially if the client has comorbidities or low immune function. Avoid overworking any one region and start with shorter sessions, 30 [03:42:00] or 45 minutes or less. I love to quote Gail McDonald.

She has so much wisdom. She says, even strokes that feel good in the moment and result in delayed symptoms, swelling, flu-like malaise, or fatigue hours later, lymphatic tissues need time to process increased fluid mobilization and over simulation can overwhelm the system. So unless you're trained and certified in manual lymphatic drainage, do not attempt to mimic or improvise lymphatic techniques, but within scope.

You absolutely can observe skin, texture, temperature, swelling, and tissue tone. You can support clients in understanding their body's response, and you can refer when concerns exceed your scope. Things like visible cords, skin thickening, papillomas, or [03:43:00] persistent asymmetry. Therapists working outside their scope can unknowingly worsen lymphatic systems and especially they risk delaying appropriate care by not referring out when early signs present themselves.

# Contraindications and When to Refer Clients

**Elizabeth Soto:** So one of the most important clinical decisions we make is knowing when to pause and when to refer out. Some skin and tissue changes are clear warning signs that hands-on care is not safe no matter how gentle our touch. So we'll look at two categories, absolute and relative contraindications. In addition to contraindications for suspected blood clot, DVT or pulmonary embolism.

If you observe any of the following, do not proceed with massage or skincare and advise a client to seek immediate medical attention. These symptoms may indicate cellulitis [03:44:00] a potentially life-threatening infection, which is especially dangerous in clients with compromised lymphatic function. Any unexpected temperature changes, especially in the limbs, discoloration, swelling that is sudden painful, red or hot to the touch skin that appears tight, shiny, or blistered symptoms such as fever, chills, flu-like fatigue, pain or tenderness, fatigue or muscle cramps in the affected extremity, or unexplained shortness of breath.

Mass in this state can spread infection rapidly. Do not proceed with the session. Advise your client to seek same-day medical evaluation, not when they have time, and help your client understand that pausing touch in this case is an act of care. You might say something like, this area is looking inflamed and warm, and given your medical history, I feel it's important [03:45:00] to have it looked at right away.

It may be nothing, but I'd rather you get it checked to be safe. Massage or whatever service your prepared to perform isn't appropriate today, but let's reschedule for X, Y, Z after this has been addressed and offer a specific date and time. You're not turning them away, you're just pausing. You are not diagnosis, you are not diagnosing, you are not making a medical claim.

You are advocating for your client and you're demonstrating that you're putting your client's wellbeing first when appropriate. You can also recommend a certified lymphadema therapist, someone specifically trained in assessing and managing swelling. And I strongly encourage you to make use of the S four OM directory to find out who you can collaborate with in your area.

Other contraindications, acute cardiac or renal conditions. [03:46:00] Cases of ingested heart failure can cause fluid, can make fluid mobilization risky. Any technique that shifts large fluid volumes, including gentle lymphatic massage, may overburden and already compromise heart vigorous massager techniques that overstimulate lymphatic drainage constrain renal filtration, especially in clients with underlying nephropathy or fluid electrolyte imbalances. So make up your own version that says something along the lines of, I'm noticing something that's outside the scope of what I can assess or treat.

And I think it would be wise to follow up with your care provider. It may be nothing, but I'd rather you get it checked to be safe.

And if you must cancel a session, document your decision factually and without assumption. [03:47:00] Put down what you observed, what you told the client, and what the client chose to do. Protecting your client also means protecting yourself and documentation matters.

Some presentations are not in emergencies, but they do call for caution. If you notice any of these, it's time to pause and assess thickened, fibrotic, or rope like cords in the tissue. These may indicate lymphedema or post-radiation fibrosis. Refer out if you do not have the appropriate training.

Papillomas ulcer, skin breakdown, weeping wounds. These are signs of tissue damage and infection risk. Although papillomas are benign in patients with compromised immunity or cancer, these lesions can become irritated, infected, or difficult to heal. And in rare cases, some papillomas can become precancerous, especially in the cervix or bladder.

So monitoring is important. [03:48:00] Radiation and induce skin changes like leathery texture, discoloration, or loss of elasticity. This skin is fragile and easily D damaged also do not apply massage over or near known or suspected metastatic lesions in bone.

These are signs that tissues are fragile and prone to injury, and hands-on work should be deferred in these areas unless you're specifically trained and credentialed to address these conditions. If you choose not to proceed,

document what you observe and encourage your client to consult with a lymphedema specialist or medical provider.

Being able to recognize when not to treat is just as important as knowing how to modify your techniques. It reflects clinical wisdom, ethical practice, and deep respect for your client's safety. Choosing not to treat is not a [03:49:00] shortcoming. It's an act of clinical integrity.

# Hygiene and Precautions for Immunocompromised Clients

**Elizabeth Soto:** And a little bit of review here. Many of our clients are immunocompromised due to chemotherapy, radiation surgery, or simply the result of chronic lymphatic congestion. This means even a minor break in the skin, yours or theirs can become a portal for bacteria. So at a minimum, you should be following these precautions.

Wash your hands thoroughly before and after every session, a full 20 to 32nd wash. Use clean linens, sanitize tools, and disinfected surfaces between each client. Always air on the side of over preparation. Do not, do not treat your clients if you are not well. Even a mild, cold, seasonal allergies or fatigue.

A [03:50:00] compromised immune system cannot afford any exposure to what you may be transmitting and check your own skin health before working. Check for hangnails, abrasions, crack knuckles, or open wounds, no matter how small. And I recommend wearing gloves if you must handle compromised skin or if your hands are not fully intact, and refer out if you're unsure.

# Ethical and Professional Boundaries in Massage Therapy

**Elizabeth Soto:** Now, as we come to the close of this session, I want to leave you not just with information, but with a clear sense of purpose and responsibility. This work requires more than technical ability. It calls for intention. When we work with clients who are vulnerable, the most important tools we bring to the table aren't just our hands.

They are our judgment, our ethics, and our professional boundaries. This work asks us to be thoughtful, knowledgeable, and humble in our approach. It [03:51:00] asks us to see the person in front of us, not as a diagnosis or a

condition, but as someone deserving of comfort, dignity, and safety. Thus, it's our ethical, and thus it's our ethical and legal obligation to know the laws and regulations that govern our license, the boundaries of our own scope of practice, and the limits that come with our own education, experience and training.

Each of us must pause and ask ourselves, what am I truly comfortable treating? What do I understand well and what lies beyond my current training? Where is my line? How will I respond when a client needs something I'm not equipped to provide?

It's about having a plan and a network. Whether that means connecting with a physician, a certified lymphedema therapist, or a more clinically trained [03:52:00] colleague. Knowing when and how to refer is part of what makes us excellent. I encourage you to become familiar with the S four M practitioners in your area and develop a network of providers you can trust and collaborate with.

And here's the truth. When we understand who we are and who we are not as practitioners, when we work within those bounds, practicing with care and intention, we don't limit what we offer, we elevate it. Staying within your scope is not a limitation. That's a strength. When you recognize signs of lymphatic distress, when you adapt your pressure or positioning based on treatment history and when you know when not to touch, those decisions are clinical excellence in action.

You don't need to have all the answers, but you do need to know what questions to ask, what signs to look for, and when to pause or refer. This is how we do no [03:53:00] harm and so much good. Please remember, our work has power. It can reduce pain, ease, fear, and restore dignity, but only when it is delivered with clinical judgment, professional integrity, and a deep respect for both the body and the person who inhabits it.

So I encourage you, be intentional, be compassionate, and be unwavering in your commitment to safe, ethical evidence-informed care. You don't have to treat everything. You just have to treat what's yours to treat and do it with clarity, confidence, and care. Thank you for showing up for your clients for this work and for the responsibility that comes with accepting both

# Q&A Session | Understanding the Lymphatic System – Best Practices for High-Risk Clients with Elizabeth Soto

**Ericka Clinton-1:** Hello everyone. So we're gonna start our q and a session in a moment, and. [03:54:00] I would just say, think about the presentation information you wanna gather, questions that you might think may help, other people with an understanding of the lymphatic system, which is a complicated system. So our chat is going to reopen four questions, and while that happens, here's Elizabeth. Thank you for joining us. Your presentation was amazing, and I'm just so grateful that you were able to share all of that knowledge that you have about the lymphatic system. as I sit here with my Dr. Vader's lymphatic drainage book, preparing for a class that I'm getting to take, this week after being trained myself, I'm, I'm still amazed at how much information there is to know about the lymphatic system. but again, I loved what you shared, particularly the ways that we can think about how we [03:55:00] approach working with people who are at risk. and I guess as I like to say, keeping our clients safe as well as keeping ourselves safe, when we work. So let's see what's going on in the chat. And first of all, a lot of thank yous and, really I think people enjoyed how informative it was. And I know that that for me is also helpful and I love the fact that I can go back and listen to it again, particularly over this year. but let's start with a question. so so that, we have clarity on approach, right?

# Addressing Specific Client Concerns

**Ericka Clinton-1:** Let's, let's really say, can we work on a client that has had lymph nodes removed? should we always avoid working on the side where the lymph nodes have been [03:56:00] removed? is someone without training okay.

To perform that massage with precautions?

**Elizabeth Soto:** Yeah. Thanks so much, Erica. It's great to be here and thanks for everybody sticking through that. I know it was highly technical and there's a lot of information. it's an entire system, so to, to try and condense that into one hour is extremely challenging. yes, to quote Gail, again, there's always something we can do.

We just need to be aware of what is going on with the patient. And I just love the fact that, Carolyn presented before me, and she did such a fabulous

presentation where she literally spelled that out. How you can walk into a patient's room where somebody is hooked up to all kinds of things and you with your touch, with your compassion, you can offer so much without having to dig in.

You're not doing trigger point, you're [03:57:00] not doing deep tissue, but you are doing so much good for that person. So we need to be aware of where we are in the body, what has happened to this body. But we don't need to be afraid. We just need to be cautious. So you can touch, use, educated touch, know why you're doing what you're doing.

**Ericka Clinton-1:** Thank you. Oh, right. We have an interesting question about a specific client. So any recommendations for treating a client with Scle scleroderma who has under want underwent, CART therapy?

**Elizabeth Soto:** I would just like to really encourage everybody to, in specific cases like this, to be aware that you are the subject matter expert. you know what you do and you know what your limits are, like I said. And scleroderma is just it depending, you are gonna have to individualize [03:58:00] it depending on what condition this patient's skin is in and how they responded to the therapy.

So I would recommend doing some research, but I also recommend collaborating. We don't need to work in a vacuum as massage therapists. We kinda like to work by ourselves in the dark, in, in, in a, in a dark room, one-on-one. But really, really encourage, again, like Carolyn said, be part of a team. Find people that you trust. Find people that you like, talk to the estheticians. We have such a great network and we have such wonderful people who are signed in today participating in this program. out who's in your area, who knows skin, who's, who's worked with scleroderma and, and then customize it for this client.

**Ericka Clinton-1:** and just for anybody who's not sure what CART therapy is, it's a type of immunotherapy that uses a patient's own T-cells to fight [03:59:00] cancer. So there is some need for T-cell collection, modification, and then infusion. and so that in itself may probably create some cautions for that client. but but yes, reaching out to your network, it's probably a great idea to get, some, just some support and help. so we can get out of that dark room. alright, so we have a question.

# Understanding Lipedema and Lymphedema

**Ericka Clinton-1:** Can you discuss any tricks for lipedema?

**Elizabeth Soto:** So any of these conditions are, how do I say this there? The short answer would be no, because we're not, we're, we're not looking for tricks here. We're looking to understand entire patient. So Lipedema is a, [04:00:00] it, it's a different beast in and of itself. It's, would encourage you if you know anybody that has it, that, that you go educate yourself.

There's more and more, there's more and more education and training tools available. Their support groups specifically for lymph lipedema and even people who treat lymphedema might not be equipped to deal with lipedema. So, I wish I had a short answer for you. I wish I had like three quick, that you could do, but it really is, it's, it's a disease that deserves its own attention and its own expertise.

**Ericka Clinton-1:** And there is a lot of information about lipedema.

**Elizabeth Soto:** Mm-hmm.

**Ericka Clinton-1:** we, I think we've all heard that, that MLD could be helpful for a lipedema patient,

**Elizabeth Soto:** Mm-hmm.

**Ericka Clinton-1:** again, investigating that, really understanding what that particular person is going through. and, and I think [04:01:00] for many of our clients, whether they have lipedema or lymphedema, it's kind of a team effort,

**Elizabeth Soto:** Mm-hmm.

**Ericka Clinton-1:** right?

So with a person who has lipedema, there's gotta be some other practitioners involved make that MLD, really benefit them.

**Elizabeth Soto:** Absolutely. And I wanted to add too, that if, if MLD is not your thing, if you are not trained, I, I really like to, to get into the nitty gritty, as you can tell from my presentation, it's something that fascinates me. But if it's not your thing, that is so totally okay. Because again, there is so much else that you can offer somebody with lip edema. You don't have to necessarily address the lip edema, like Erica said. Definitely collaborate with somebody who is prepared to do that, but that doesn't mean you have to turn them away. And that

doesn't mean that you don't have something to offer. Just, where, know where that line is and, and be excellent within your own [04:02:00] parameters because you, you absolutely can do that.

And you can do so much for that patient.

**Ericka Clinton-1:** Thank you so much, Elizabeth.

# Massage Considerations for Cancer Patients

**Ericka Clinton-1:** another Can you massage someone that has cancer in the lymph node?

**Elizabeth Soto:** Yes, you can, you can always do something for somebody, but you would avoid the area. not because we can cause metastasis that's like, cancer is not like a blood clot where we can break it off and then some it'll lodge somewhere downstream and become a full-blown cancer. I, I was at a metastatic breast cancer conference where I think it was the oncologist that said, well, if that was the case, everyone would have cancer by the time they're 18 months or something. system is responsible for taking those things out of the system. but we still wanna avoid the area that has the disease. You can work on the rest of [04:03:00] the body. You can definitely offer them massage. Just be aware of the precautions and be aware of, location and positioning and things like that.

**Ericka Clinton-1:** Oh, so there's some great conversation about lipedema going on in the chat and, our operations manager, Ashley Haya, has wonderfully put in a link to the lipedema organization, the National Lipedema organization lipedema.org, which has a lot of great resources and information. so here's a good question.

# Preventing and Managing Lymphedema

**Ericka Clinton-1:** Can massage help prevent lymphedema?

**Elizabeth Soto:** Unfortunately, the answer to that is no. It the, [04:04:00] and I, I wanna be careful how I say this, because when our patients come to us, the damage is already done. Whether it, whether it's genetic or whether it's something traumatic or whether it was the disease, they're already

compromised. That's why I emphasized the stage zero, the latent stage presentation.

We can't see what's happened under the skin. And it might be that the, everything looks okay on the surface and the system is coping, but it's damaged. So we can't reverse that. We can't, but we can prevent it from getting worse. And that is where our vigilance and our palpatory skills are. Observational skills are so, so important because we see these patients for longer and often, more frequently than other practitioners do.

So we can often catch it before it gets [04:05:00] advanced, and we can absolutely be careful not to exacerbate it because we can make it worse.

**Ericka Clinton-1:** Thank you. That's a good thing to clarify. let's bring some of this, into like the practical sense of the work in terms of positioning. What's the best way to position a client who's had lymph node removal or breast surgery?

**Elizabeth Soto:** Yeah. So you wanna know where everything is and you want to consider where, where that was. You don't want to, you wanna avoid compression. That is, I think what I try to emphasize in my presentation, these are fragile more than blood vessels. They're thinner, they rely on these flaps to open and close.

So compression is probably the, the thing that we want to avoid the most, whether it's with our hands or whether it's with the weight of the person's body. [04:06:00] So we want to avoid on that area. You also wanna be aware of whatever might. Else might be going on, whether they're lines or whether there's a port, anything like that you wanna avoid putting them on that side or on that body part.

So bolsters, pillows, whatever you can come up with to, to help with that would be great.

**Ericka Clinton-1:** Okay. so interesting question. What about capturing patients prior to the treatment that affects the lymphatic system? Any research on prevention?

**Elizabeth Soto:** That is a really good question. I know that in some, in some places, they will take measurements, prior to treatment so that they can kind of monitor even subtle changes in limb volume. But I only know of this, and I could be wrong because I am still learning and I, I, [04:07:00] the research and the treatment protocols are always changing, but it tends to be for breast cancer

patients and they tend to measure the limb. we're finding is sometimes lymphedema can happen within the breast itself, and then the patient and the provider are unaware because the breast is swelling. and, nobody's done before and after, measurements for that. So our vigilance again, is, is really valuable. And patient observation.

Listen to what your clients are telling you.

**Ericka Clinton-1:** Very important, very important. so here's an interesting question. Can I use heat exfoliation or cupping on clients who have had radiation?

**Elizabeth Soto:** So I would say avoid all of the above. And I think like Rhiannon and Fiona also did a really good job highlighting all the things that happened within the skin that maybe our clients even aren't talking [04:08:00] about because they don't realize that that, that that's something that needs to be brought to the forefront. So there will be skin changes and you want to avoid anything that could incite an inflammatory response. So avoid heat, avoid friction, avoid anything that irritates the skin. And I would say avoid cupping as we traditionally know it. If you are trained in MLD, if you're, if decongested therapy and you can do negative pressure therapy, there's evidence that that is very effective. But only do that if you know how to do it.

**Ericka Clinton-1:** Okay. And speaking of, certified lymphedema therapist, when should we refer someone to ACL T?

**Elizabeth Soto:** I would say at the first sign of any doubt, again, that doesn't mean that you've failed or that you are not a capable [04:09:00] therapist or clinician yourself. I just, I believe really strongly in. in collaboration. So I will not hesitate to, to email or text someone and say, Hey, what do you think about this? two heads are always better than one, you just, I, I, I just really believe in just collectively doing the best that we can for our clients. So make a, make a point of developing a network and finding people that you like and that you trust that you can kind of bounce ideas off of. And sometimes somebody will say, oh yeah, I, I've seen that a lot, and it would be easy for them to take on your client and it might happen the other way too.

I know in the hospital we, I had the luxury of just going down the hall and saying, Hey, what do you think? we need, we need to be a little bit more, intentional about that when we're in private practice.

**Ericka Clinton-1:** Definitely, definitely. All right. [04:10:00] This is a great question and I hear this a lot from, my oncology clients. so one of the folks, who's attending our conference today said I recently had two lymph nodes removed for a sentinel node biopsy. When I expressed my concern about lymphedema, my surgeon said that my risk would be low and based and based on the amount of nodes removed. hold on. This moved. ah, is the risk lower with fewer nodes removed.

**Elizabeth Soto:** That is, that's a pretty loaded question because I think what we're finding with the lymphatic system is it's much more individualized than, say the circulatory system. well, maybe I shouldn't say that, but it is very much individualized and just because you've looked at lymph nodes, so I'm seeing the question also about evaluating, the lymph nodes themselves, [04:11:00] but you also need to be aware of the vessels that are feeding and transporting fluid into and out of the nodes.

So it's really the entire system and everybody has different levels of efficiency. They have different transport capacities. so it's not really the number of nodes. There's so many more factors. Sometimes all it takes is one lymph node to cause severe congestion problems.

**Ericka Clinton-1:** but for the person who asked that question, unfortunately, that is, a number of surgeons will say is that the low number of lymph nodes being removed reduces risk. but again, you can see lymph lymphedema happen in a person with one node years post lymph node removal they cut their hand gardening on a rock

**Elizabeth Soto:** Mm-hmm.

Mm-hmm.

**Ericka Clinton-1:** and [04:12:00] then we had swelling. so it, it's, it's a bit more complicated than that. someone else commented that at the institution, where they work, the plastic surgeons evaluate the lymphatic system prior to surgery to determine if they do lymph node transfer or lympho venous bypass add surgery to help prevent lymphedema. and, those are two newer kind of procedures. unfortunately they're not standard care yet. and I think we can all think of of the challenges that would present with that. as one of my teacher said, well, once you do lymph node transfer, now you've compromised the lymph nodes from the area you took the lymph node from to put in the area that was already compromised. but the lympho venous bypass, all of these things have had some really significant and positive [04:13:00] results. and, they may

become standard, we get more information about the benefit to the larger population.

**Elizabeth Soto:** very exciting and it is very new, that type of microsurgery. I know that, Vallas down in University of Tennessee is doing that type of work. So, yeah, hopefully, this will be refined and developed and become more widespread and people will be at less at risk for lymphedema.

**Ericka Clinton-1:** That would be wonderful. All right folks, I want us to stay on time. Thank you. Thank you so much, Elizabeth. This was great. any questions that we did not get to talk about today in the q and a session? We will combine, compile and forward the answers to everyone, a little bit later. So enjoy your break.

Thank you.

# Presentation | Therapy for Bone Marrow Transplant Patients - Supporting Healing & Comfort Through Touch with Shannon McKnight

**Ashley Hiatt:** Hello everyone. Welcome back we'll go ahead [04:14:00] and lead into our next presentation and I will head the mic over to Kimberly Austin who will be moderating our session. Enjoy.

**Kimberly Austin:** Thank you, Ashley. Good morning, afternoon, or evening, wherever you are. I would like to welcome you all to our presentation of therapy for bone marrow transplant patients supporting, healing and comfort through touch with Shannon McKnight. I'm Kim Austin, your moderator for today's session. Okay. If you guys have any questions, please make sure to save them for the q and a portion,

**Shannon McKnight:** hello everyone. My name is Shannon McKnight. I'm so excited to be invited to present to you all this year. And I'm really excited to bring you the topic of massage therapy and aesthetics for bone marrow transplant patients. I want to start off by giving you a little background information about who I am.

I've been a massage therapist in Ohio for almost [04:15:00] 17 years, and most of those years were in private practice until around 2019. For the last four years, I've focused more on hospital and hospice. based care and that has included oncology massage. I currently serve as a senior massage therapist at U. C.

Health at our Blood Cancer Healing Center, and that's in Cincinnati, Ohio. And I'm also a team member with our Osher Center for Integrative Health. And that's out of the University of Cincinnati. At the Blood Cancer Healing Center this is predominantly cancer, blood cancer patients, though recently we have actually transitioned into seeing some patients here with solid organ tumors as well.

We are a relatively new facility that opened in July of last year and has really just been an extraordinary place. For our cancer patients within our facility we provide outpatient clinic and infusion care. We have advanced therapies infusion [04:16:00] where we, our patients are mostly clinical research patients, and then we also have a hospitalized population that includes patients.

with medical complications as well as our bone marrow transplant patients. I am part of a very small two person massage therapy team. We both work a part time and we will soon be joined by acupuncture care as well. But through the Osher Center for Integrative Health, we also provide a number of community based group classes, such as yoga, tai chi, mindfulness, and sound immersion.

And our patients and caregivers are encouraged to attend those free of charge. In addition to my role at UCHealth, I also am a member of the S S4OM Education Committee. I serve on the S4OM Roar Committee, and I am also the S4OM Ohio Regional Champion. I'm sure everyone listening today has their own reasons for choosing to watch this [04:17:00] presentation.

So really, I just invite you to be curious and allow yourself the best opportunity to take the information in. But also, I encourage you to jot down any questions that you may have along the way so that we can further discuss those during the Q& A. So, Let's talk about our objectives for today. Working with bone marrow transplant patients can be safely done through a combination of our foundational oncology massage techniques as well as supplementary modalities.

So I'm not really here today to teach as much of from a technique perspective, but to provide some knowledge about what a bone marrow transplant is. And what the patient goes through and how we as massage therapists and estheticians can best support those patients. The main goal of the presentation is to help you understand the process of bone marrow [04:18:00] transplantation and the side effects so that if you are interested in working with this population,

I feel like this information is going to help you be better prepared to support them.

Like with many other cancer patients, the process of preparing for receiving and managing life, managing through life after a bone marrow transplant, it's not linear. Our patients go through many ups and downs throughout their process and how their body reacts at any given stage is something we need to feel comfortable understanding.

And because massage therapists tend to be, we tend to be those medical providers who spend a more extended period of time with the patient at any given time. So I may on any given day spend 30 minutes to 60 minutes, sometimes even 90 minutes with any particular patient. So, there are not [04:19:00] many other caregivers in our facility who spend that kind of extended period of time in their presence.

The side effects of the treatment of the trans and and the transplant itself those side effects can present at any time, including when we are in the room with the patient. So the more prepared we are and the better understanding we have about what that patient is experiencing, the best, the better that we can support them.

So with that our objectives today are I'm going to define what stem cells are so that everyone is clear on that and what their role is in bone marrow transplants. We're going to define the various types of bone marrow transplants and discuss the various symptoms that may be present themselves throughout the treatment process.

And we're going to talk about our role as massage therapists and some estheticians as well, and how we can provide the best possible care. So I believe that this topic is really important. Bone marrow transplants are [04:20:00] complex and the journey for our patients is a marathon and not a sprint. So we need to be as prepared as we can for those peaks and valleys that come along the way.

If we're going to be a consistent part of this patient's care team to provide them the best opportunity for improved quality of life through the duration of their care. So the overall goal today is really to make sure that those of you listening come out with a better foundational knowledge of what a bone marrow transplant is and how you as a massage therapist or an esthetician can provide care.

The best place for us to begin is going to be getting a better understanding of what stem cells are because they truly are the powerhouse behind the transplant itself. I'm sure many of you over the last several decades have heard at least.

something about stem cells and the breakthrough treatments that have been created with them. I think as recently as last week, I heard something in the news about stem cell transplants and how they're helping in medical care. [04:21:00] Stem cells in our body can best be described as master cells. They're like a blank slate of our cells, and while they're the basis of every cell, tissue, and organ in the body, they have a very unique ability to become, if necessary, any type of cell in our body that it may need.

They are the only cells in the body that have the ability to constantly self renew, so they can make copies of themselves over and over again, or they have the ability to differentiate into other specialized cells, such as muscle, brain, or blood cells. Because of their unique characteristics, some cells play a crucial role, excuse me, crucial role in medical treatments because they can replace damaged or diseased cells.

So, most of the patients that I work with in BMT have blood cancers. And blood stem cells are predominantly made and stored in the body within the bone marrow. So during the process of [04:22:00] blood cell formation, stem cells become new blood cells through a process called hematopoiesis. Our bone marrow is the primary site of this blood cell formation and it's also the storage site for our stem cells.

There's a lot of important scientific steps that take place for stem cells to differentiate into the cells that the body needs. But for the purposes of this presentation, it's most important for you to know that they have the ability to become red blood cells, platelets. white blood cells. They can also become T cells, B cells or natural killer cells.

So again, I'm working predominantly with bone marrow transplant patients in the blood cancer world with blood cancers, the body's production of blood cells that becomes disrupted. So when this happens, abnormal blood cells begin to take over and they overwhelm our normal blood cells, and this can happen due to mutations in the stem cell.

It can also happen because of their environment. So [04:23:00] leukemia and lymphoma both originate in the lymphocyte or in the white blood cells and impact our immune system. So if we want to talk about those a little differently, leukemia originates in the bone marrow and then spreads into the bloodstream.

It's caused when there's an overproduction of abnormal white blood cells, also known as blast cells.

Those rapidly divide so uncontrollably that a buildup of immature non functional cells begins to crowd out the space for the healthy cells. This leaves the person at high risk marrow's ability to produce other cells such as red blood cells and platelets. Whereas lymphomas develop in the lymphatic system and also affect certain white blood cells, they specifically lymphocytes when those lymphocyte cells divide rapidly and become lymphoma cells, they can begin to bind together and form tumors.

So two different ways [04:24:00] there that the cells are not functioning correctly and impacting the immune system. So the stem cells are the foundation of the bone marrow transplants because of their ability to regenerate blood in the immune system. When a person goes through the transplant, they are resetting the system by replacing the damaged or diseased bone marrow cells with new healthy cells.

Those cells can then begin to replicate and differentiate as they're designed to do. There are multiple kinds of bone marrow transplants, and we're going to explore each one a little bit deeper. And the ones today that we're going to talk about specifically are autologous, allogeneic, haploidentical, and I'm also going to talk about CAR T therapy because that's something that in our facility, we see quite a bit of.

So to recap. Really quick. We've learned that stem cells, which are mostly stored in the bone marrow, are the master cells and that they can become [04:25:00] whatever cell is needed. We've also learned that when those stem cells mutate or they're harmed by their environment, a bone marrow transplant can be one of the treatment options available to replace the diseased cells.

with the new healthy cells. So autologous transplants are when a person's own cells are being used and they are used most often in conditions where the bone marrow itself is not diseased, such as with certain blood cancers like lymphoma or multiple myeloma. Also autoimmune disorders such as multiple sclerosis with autologous transplants.

The patient's own stem cells are harvested before the transplant and before using chemotherapy or radiation to kill off the cells. After the stem cells are harvested, the patient endures intensive treatment to destroy the cancer cells, and then their own stem cells are re infused back into their [04:26:00] body to help rebuild the immune system.

So the biggest advantage of An autologous bone marrow transplant is that really there is little to no risk of rejection when the cells could attack the body. And that's important. We're going to get into that a little bit more lately later when we talk about the other types of bone marrow transplants.

So, you'll get a better understanding of why when we start talking about the side effects of treatment as well. There are multiple stages to an autologous bone marrow transplant. And I really want everybody to know and understand these because so much can happen with the patient at each of these stages.

And I think it highlights how important we as massage therapists especially can be within all of these different stages at any given time. Especially if you're in a hospital based setting or in a outpatient clinic setting, but of course in, in any type, type of contact with these [04:27:00] patients. So multiple stages to autologous BMT during the first stage.

We call that the mobilization stage. The patient's gonna receive daily injections. I'm going to tell you the name of the drug and you may or may not want to remember it, but if you work with this population or want to, I would kind of jot it down. But the drug is called filbrastum and they're going to receive these injections for about five days prior to and through their collection.

And though ultimately the number of the injections it, it really is going to be dependent upon their specific disease type. I want you as massage therapists to know about filgrastim because it can cause the patient to have body aches and bone pain because it's forcing the body to make more stem cells.

This is a time where massage therapists can come in handy just providing some comfort and relief. The second stage is called the collection stage. And that's when the patient is going to have a long day. At usually it's [04:28:00] an apheresis, they'll come in. It's about four to six hour day can vary, but about four to six hours.

And during that time, their stem cells are going to be collected from the either their blood or their bone marrow. And then in the third stage we call that the conditioning and treatment phase. That's the time where the patient is. going to receive high dose chemotherapy. And that's going to happen for about 2 to 9 days prior to their transplant, depending on the specific disease type.

And that is done to completely kill off all of their cancer cells and remaining bone marrow cells prior to implementing their cells back. So the second and the third stages are when I as a massage therapist really begin to offer support

because this can be a really stressful time for the patient and the body is really starting to to change so, or to have other side effects and change.

If you prefer, if you're a visual person and you [04:29:00] prefer a visual diagram of this process, The graphic that's on the right of this particular slide is going to offer a really good illustration. This graphic is actually from the Leukemia and Lymphoma Society, and it's offered on their website, and I've put that link on there on the slide.

I think this is a wonderful graphic, again, if you're more visual, of understanding the cycle and process that patients go through for an autologous bone marrow transplant.

The next type of transplant we're going to talk about are Allogeneic allogeneic transplants are when a donor cells are used for treatment. So this kind of transplant is best used for diseases where the bone marrow is producing defective blood cells. And that's going to be something like leukemia, aplastic anemia, or other genetic disorders such as sickle cell disease or thalassemia.

These transplants are also used [04:30:00] for high risk cases of Hodgkin's lymphoma, myelofibrosis, and myelodysplastic syndrome. With allogeneic transplants, the process includes finding a donor, and the process for doing that is called an HLA match. HLA stands for Human Leukocyte Antigen. HLA matching is completed and determines the availability of a matched related donor or a matched unrelated donor matched related donors have the highest potential for being a full match and being a full HLA match reduces the patient's risk of rejection and other complications.

The process of completing an allergy allogeneic transplant includes killing off the diseased bone marrow of the patient that's done using high dose chemotherapy or radiation. Thank you and then completely replacing those cells with the donor's healthy cells. So the advantage of this kind of [04:31:00] transplant is that the donor's healthy immune cells can help fight off the patient's cancer.

The biggest disadvantage of this transplant, though, is a complication called GVHD. This stands for graft versus host disease. GVHD occurs when the donor's healthy immune cells begin to see the patient's tissues as foreign and it attacks them. So understanding GVHD and the related symptoms is important as massage therapists and estheticians.

So I'm actually going to be going into that in more detail here in just a little while in the presentation. And haploidentical transplants, those are considered when a fully identified HLA match donor cannot be found. These haploidentical stem cell transplants. are when the donor shares 50 percent of the HLA markers with the patient recipient, and in these cases, when the donor is a [04:32:00] half match, it's more likely that the match donor is going to be a family member, such as a parent, child, or sibling.

There are still many complications and risk for the patient, including infection and GVHD. And attempts are made to manage this with immunosuppressive therapies. But patients are typically monitored for signs of infection in that early post transplant period. pretty closely. Graft failure can also be a concern with this population because the donor cells may not engraft properly due to that limited HLA match.

Despite the complications and the risks though, this kind of transplant, these are increasingly common when attempts to find a full match donor have failed.

So at the institute that I work for, the blood cancer institution, Here we see a number of cell transplants that are called CAR T cell therapy, and I'm not sure how common this is in other [04:33:00] places, but I wanted to bring it up because this is more common here in our hospital. So I think it's worth discussing.

CAR C. A. R. stands for chimeric antigen receptor. and then T cell therapy. So it is definitely a mouthful. Card T cell therapy was originally approved by the FDA in 2017 as a pediatric ALL treatment. The Card T cell therapy transplants are now also used for those who have been diagnosed with diffuse large B cell lymphoma, mantle cell, and multiple myeloma.

So as a reminder, your T cells are one of the most important types of white blood cells, and they're predominantly responsible for arming our immune system and its response. With CAR T cell therapy, those T cells are removed from the blood. And then they go through a process of having a new gene inserted inside of them to make it [04:34:00] easier for the T cell to recognize and fight those cancer cells.

So this process involves several steps. First, the T cells are collected from the patient. They do that during a process called a leukophoresis, and that can take about four to six hours. Massage therapists can be beneficial during this time because of the common side effects of leukophoresis. Those are not limited to, but include fatigue and muscle cramps.

After the cells are collected, they're sent off to a lab where millions of modified T cells are created. It takes about three to six weeks for the lab to create a beneficial enough amount of those CAR T cells for the patient. So during that waiting period the patient is most likely going to undergo recommended chemotherapy or radiation to prevent any kind of disease progression.

And then finally, once the CAR T cells are returned to the medical facility, the [04:35:00] patient is scheduled for their transplant and they'll spend approximately two to four weeks admitted to the hospital. So during the time that the after the transplant, the patient's going to be monitored, monitored for a variety of side effects.

the most concerning of which is something called cytokine release syndrome. So while that can CRS is very concerning or can be, it is not unexpected. And it occurs when the new CAR T cells begin to engage with the targeted cancer cells. And when that happens, cytokines are released into the bloodstream and the cells rapidly expand, causing an immune reaction.

So this can lead to widespread inflammation and organ dysfunction. The most common symptoms as a massage therapist that you're going to look for if you are in the room and pay attention to are going to be fever, fatigue, muscle aches, increased heart rate, nausea and vomiting. We may even [04:36:00] see severe symptoms, a fever over 102, severe low blood pressure, difficulty breathing, confusion, altered mental status.

or organ dysfunction. You won't know so much about the organ dysfunction, but I still think it's worthy of, of noting those in there. It's important for us again, to, to understand these things so that we know when something doesn't seem right. If we're in the room these side effects can be a sign that the CAR T cells are actively working against the patient's cancer and the medical team's going to be monitoring the patient.

They're going to be monitoring the patient closely for this reaction. But as a massage therapist, you may spend that extended period of time in the room. It's important to be aware of the CRS symptoms and any other symptoms that may come up and report those. to the medical team as soon as possible.

So, switching gears a little bit, now that we've discussed the, the transplants themselves, we've started with the stem [04:37:00] cells, we've gone into the types of bone marrow transplants, let's talk a bit about the common complications of a bone marrow transplant. I think it goes without saying that

there are many complications that can be common for the for allogeneic and autologous bone marrow transplants.

Those are going to include a risk of infection due to a weakened immune system. Mucositis is something that you're going to hear a lot about. It's a painful inflammation of the digestive tract and this mucositis makes it very difficult for patients to eat because of the sores that may develop.

Within the entire digestive tract. A graft failure, that's when the donor cells do not engraft properly in the recipient. A patient may have organ damage, such as kidney or liver failure, as well as impact to their lungs. Fatigue and weakness are very common with this population, and it [04:38:00] is definitely a long term part of their of their world.

Once they have started into their treatment and bone marrow transplant, fatigue and weakness can have a long term effect. And that's something important to be aware of as practitioners, both in the hospital and as well as those in private practice. And then of course, I've mentioned graft versus host disease, which I'll go into more shortly.

An additional complication for CAR T cell therapy includes something called ICANS, I C A N S. And that stands for Immune Effector Cell Associated Neurotoxicity Syndrome. I want you to pay attention mostly to the neurotoxicity part of that mouthful of a, of a thing there.

And the reason for that is because this can cause serious symptoms, such as headaches, changes in consciousness. confusion or agitation, seizures, tremors, trouble speaking or understanding and loss of balance. [04:39:00] Anytime you are working with a patient who exhibits any of these symptoms, it is necessary and important for you to report those observations to the bedside nurse.

As soon as possible and then make sure that you chart on what was observed and who was notified. I think that is really important. I know that we want to do the, we want to calm people and sometimes, you know, we can think, Oh, I'll just, this is a lot. There's a lot going on here with this patient and I'll come in and I'll just provide some supportive care.

Never assume that the bedside nurse or the medical team has already become aware of those side effects. Make sure that you report them and that they can make that decision on what needs to happen moving forward, or they can let you know, yes, we're aware, and then depending on what that symptom is, you can determine if it's safe for you to proceed.

Okay. BMT survivors are going to require ongoing care for years after their transplant due to potential late effects of treatment. [04:40:00] So some common long term effects after a bone marrow transplant, and I apologize, I know some of these in the blue might be a little bit small.

The first one is fatigue and weakness. And we've talked about this that can persist for months or years. So this is important for the, I think a lot of these things are important, not just for the patients that you might care for in a clinic setting or, you know, another professional setting outside of outside of your hospital.

If you're in a in a private practice, these become very important as well. So fatigue and weakness can persist for months to years. Chronic GVHD, chronic being over 100 days or more and ongoing may cause skin issues, organ involvement and joint pain. Neuropathy, which is going to be nerve damage leading to numbness, tingling and pain.

We're going to talk a little bit more about that also. Bone health issues. Bone marrow transplant [04:41:00] patients are at risk of osteoporosis due to steroids or chemotherapy that they've gone through. There can be an increased risk of cardiovascular disease, so heart and lung concerns. should be on the radar.

it really goes without sa and psychological health for these patients, anxie PTSD like symptoms. And I profession, especially if you're going to be working with patients who go through so much intense treatment like this population does to really know how to within your scope, work with patients who have long term anxiety over their treatment or having gotten through their treatment.

I think that is very important, including having some trusted resources that you can refer that patient to if they need additional assistance outside of what you can manage in your scope.

[04:42:00] Okay, GVHD is a really important issue to talk about specifically. Because it is very common and it can potentially be a serious complication that mostly affects the allogeneic bone marrow transplants.

# Understanding Allogeneic Transplants and GVHD

**Shannon McKnight:** If we remember, the allogeneic transplants are those that are not using their own cells. So their transplanted cells were from a donor

GVHD occurs when those donated immune cells which are considered the graft, they see the recipient or the host tissues as foreign and begins to attack them.

So if you are familiar with organ donation or organ transplant, we talk in that scenario as more rejection of the organ. So you have the recipients. body rejects that new tissue. In this case, this is opposite. We have the cells, those healthy cells that the [04:43:00] donator has provided. Those healthy cells look at this new body and go foreign.

I need to attack them. So this is it can be very common. But it is, it can be very serious.

# Types and Symptoms of GVHD

**Shannon McKnight:** So, There's two different types of GVHD, acute and chronic. So acute GVHD occurs usually within the first 100 days post transplant, though it can appear later. It primarily affects the skin, gastrointestinal tract, and the liver.

Within the skin, we're most likely to see things like rashes, redness, or peeling skin that would be similar to a sunburn. In the GI tract, we're most likely to see the patient have nausea, vomiting, and sometimes severe diarrhea. And with the liver, you're most likely going to see elevated liver enzymes in their labs and potentially see jaundice in the patient.

And I see that, I say [04:44:00] that about the labs because here in, in my facility, and I encourage anyone working with this population to have access to those labs. So I have them through our EPIC system. Every single time I see a patient, I am accessing their labs, no matter how many times I've seen them. So if you are working in an outpatient setting and you're checking labs and this is just kind of anecdotal because you're not going to do anything about elevated liver enzymes, so to speak, like on your own, but it's good to be checking those things.

So ask your, your Client, if they could provide for you, their labs, if that's an appropriate thing to do. Chronic GVHD is most likely to develop after 100 days post treat transplant, and it can last anywhere from months to years. So it often resembles an autoimmune disorder. So it also can affect multiple organs like the skin, the mouth and eyes, lungs, liver, joints, muscles.

Symptoms for [04:45:00] chronic GVHD of the skin are often going to look like thickening, scarring, or pigment changes. And with the mouth, they're going to

look, mouth and eyes, they're going to be more like dryness, ulcers, or irritation. And with the lungs, you're most likely going to see shortness of breath or some kind of lung fibrosis.

So, be on the lookout for that for mostly for shortness of breath with that one. And patient may also share that with you. And then with the liver again there may be liver dysfunction, including jaundice. If the joints and muscles are impacted, you're most likely going to see stiffness, weakness, and pain.

The risk factors for DVHD are going to be greater for patients who have a greater difference between the donor and the recipient when it comes to their HLA markers.

The greater the difference, the higher the risk. So, patients with unrelated donors are going to have a higher risk than a matched sibling [04:46:00] donor. And patients who receive a peripheral blood cell transplant versus a bone marrow transplant, they're also going to be at high risk due to them having more immune T cells.

So just be aware of that, that even if you happen to work with someone who's had a not a bone marrow transplant, but a peripheral cell transplant, you may see some of this as well. Again, medical teams are going to be monitoring the patient because these are known potential side effects. However, we as massage therapists are we are likely to pick up on these things and see them.

You know, I spend roughly 30 to 60 minutes I mentioned at a time. So I feel like our role can be pivotal when it comes to that patient getting potentially quicker care for any of their side effects. It becomes an advantage that the medical team has another set of eyes to bring things to their attention.

So during the time that we're walk or working and talking with a patient, we are likely to observe [04:47:00] some concerning side effects at one time or another. So just make sure that you're immediately reporting those as I mentioned before. That's the most important thing to stress there. We can't always, as massage therapists, address these issues.

Some of them, obviously, we can, pain and muscle and things like that. But we, we need to be aware of them so that the patient can receive quicker care.

# Role of Massage Therapy in Bone Marrow Transplant Recovery

**Shannon McKnight:** what is our role? The role of massage therapy and bone marrow transplant recovery. I think everyone at this point should have at least a good baseline understanding of how complex bone marrow transplants are and the impact that they can have on the patient's body. So it's a good time, I think, to segue into what our role as massage therapists.

and estheticians are for bone marrow transplant recovery. Because I think that's ultimately what everyone here wants to know. And, and I know that there's a lot of detail in the beginning part of this [04:48:00] presentation. So if anybody needs additional information, we certainly, please reach out and we can provide that information from this presentation beyond what's on the slides if needed.

in the context of everything that the patient has been going through, I, the question how can I as a massage therapist best support this patient through their journey should be one that you're always asking yourself. We need to understand that our place in the care of these patients can be very long term if the patient desires for that to be the case.

As you can see from the explanation that I've given the patients can present to us in various locations, various phases of their journey in healing so you may see them in private practice, you might see them in an outpatient infusion setting, or in a hospital based setting where they're admitted.

So they come into our outpatient infusion clinics for treatment when they're at the beginning of their journey, and we may be asked to address side [04:49:00] effects long before transplant actually occurs. So if you go back to the beginning of the presentation, when I was talking about the different phases, a patient may be getting high dose chemotherapy to.

prohibit the advancement of their disease. They may be at the beginning of their healing journey receiving you know, any number of therapies while they determine the best treatment process. So it, you may encounter them long before transplant is even discussed or So so I'm, I'm fortunate that in my hospital I circulate to all of the hospital and clinic areas here.

So I have the ability to be able to meet the patients throughout their journey. I feel very blessed to be able to do that. It may be early in their diagnosis and I

work with them in that outpatient setting. And then I get to continue to see them when they finally admitted to the hospital for their transplant.

So once they're discharged from the hospital and they return to the outpatient [04:50:00] clinic, I can continue to monitor them and work with them from there as well. So again, I think that it's a very fortunate situation and then also maybe a unique one that our massage therapy team has that long term connection with our oncology and transplant patients.

So we get a lot of continuity and care of care, which I think is very special and important to our patients. The number one supportive process that massage therapists provide, even though we are hands on providers, includes the therapeutic presence. I think that the, that presence that's inherent in the work that we do is probably the most critical thing for this population.

These patients are incredibly overwhelmed. They have a lot of anxiety going through this process. And while we are not therapeutic counselors, our presence in the room and in their lives can be of extraordinary benefit and we should not ever think less of that. We are not just massage [04:51:00] therapists or just estheticians.

So I think this is a very good reminder to everyone listening. In addition to our therapeutic presence, the types of things that we as massage therapists can do are help with pain management reducing that muscle and joint pain stress reduction, which we just briefly talked about when, you know, we're.

What we do helps reduce cortisol and promotes relaxation. We can definitely help improve sleep. Insomnia and fatigue are common concerns for cancer patients as a whole, but especially for patients who are admitted to the hospital when it's very difficult to get that restorative sleep. Lymphatic support is something that we provide through the encouragement of circulation and immune function and an overall just increase in emotional wellbeing.

And the fact that massage therapy can. help decrease that anxiety and depression through both healthy touch and connection.

So let's talk about pre massage considerations. [04:52:00]

# Pre-Massage Considerations and Safety Protocols

**Shannon McKnight:** So first and foremost, we need to be actively communicating with the oncology medical professionals involved in the patient's care. Even if the facility you may be working in expects you to perform massage or a patient contacts you in your private practice seeking deep tissue massage, it is important for you to understand what you do and when it may not be appropriate.

so that you can clearly communicate to the medical team or the patient. You must feel empowered to professionally communicate your role and also your limitations. Before working with a patient, you want to be sure that they don't have an active fever, infection, clotting or clotting disorder or blood clot, or severe GVHD.

In the hospital based setting, this can be done by checking with the bedside nurse and with the electronic medical record. If you're working in private practice, it's important that you've not just received [04:53:00] consent to treat from a doctor. Don't be afraid to ask your client if you can directly communicate with their medical team to understand what their most up to date treatment and health status is.

These, this is a fragile population, and that is why I stress these things, is, you know, at any time, things can change, and we just need to have as, the best up to date information as possible. So assessing the patient's condition each time you work with them is critical. Changes can occur quickly. I had a patient last, it was, I think in the last couple of weeks on a Wednesday, his platelets were 100.

And then two days later, when I saw them, they were down to 35. So each time you have a session with a patient, you need to treat the collection of information. Like it's the first time you've ever seen them and do not make assumptions. What is the patient's fatigue level? That can change rapidly as [04:54:00] well.

So transplant patients are encouraged to move their bodies as much as they can when When they're able, whether at home or they're in the hospital, walk, walk as much as you can even when they're admitted here. So you can't assume that they are not active. If the patient has been feeling fatigued or experiencing insomnia, just adjust your sessions and make them shorter in duration.

We want to have a good balance between their activity level and what we're providing so that we're not overtaxing their system. Checking platelet levels before each session for the most up to date information is crucial. In the hospital

setting, these labs are collected usually each morning. I know in our facility they're done bright and early before I'm even here for those admitted patients.

And then prior to the outpatient infusion setting, they go to our lab. In my setting here. And so before they even come up to infusion and before [04:55:00] I would see them, we have those lab results. And if you're seeing patients, these clients in private practice, ask them how recently they've had their labs drawn.

And if they would mind showing you the results these days, I think most people utilize some kind of patient accessible electronic health record for around where I live. It's my chart. They might have a similar app somewhere else in the country or in the world where they can easily access their information in their labs.

And if they're willing to, that would be something really important. So it's important for you as the therapist to set clear guidelines on what information is needed in order for you to practice safely. So the guidelines that we use here in our hospital are that anyone with platelets at 20, 000 or less may not receive massage therapy services because Research has shown that at that level, spontaneous blood vessel rupture may occur.

So any additional pressure from massage [04:56:00] therapy could cause harm. And we were not here for that. In this case, we pivot to other hands on modalities such as an energy modality. Or other appropriate supplemental option. Check the skin integrity during each visit. Prior to working with these patients, ask them if they've noticed any changes to their skin.

Is it thinning or is it thickening? Is there swelling? Are there any abrasions or rashes? Make sure to assess for these during your massage as well, because the patient or client may not have even noticed if they've had, had changes in particular parts of our body. And we would, we would like to share that information if we notice it.

Just as we learned in foundational oncology massage training, always ask about and be aware of venous access devices such as PICC lines, ports, central lines, and also continuous medication pumps. So they may have those as well. Some patients are sent home with a continuous pump. Even if you're checking within some kind of [04:57:00] electronic medical record prior to treatment, check on the patient.

before their massage and verify that it's in the location where you expected to see it. This is very important in private practice setting too, where you won't

have access to these details in advance of seeing your patient. Make sure that you're assessing for pain avoiding too much overstimulation in areas that are sore, and avoid, avoid abdominal massage with any patient who has a suspected GI involved GVHD.

that patient's probably not going to want that work anyway, but it's worth noting. Use of appropriate infection control practices are critical with BMT patients. They are severely immunocompromised and I cannot overstate that. Wash your hands thoroughly with soap and water or hand gel prior to any massage.

Soap and water after you use creams or lotions. Always use gloves when a patient has been given high dose chemotherapy. Some chemotherapy [04:58:00] medications can emit through the pores of the patient's skin. I bring that up because here, some of the home, some of the high dose chemotherapies even require the patient to change out of their clothes and for the sheets of their bed to be changed after.

So again, communicating with your medical teams who may have a better understanding of when those high dose chemotherapies are being used. So just some clear communication will help you. Sanitize all linens as you normally would or tools before and after use in private practice and avoid exposing yourself to these patients if you have a cold, flu or other contagious condition and use a mask if appropriate.

We are actually still in our population. We never stopped masking with our patients who are bone marrow transplant or who are admitted to the hospital. They're so immune compromised. We have to be really careful. And then use of CHG compatible lubricants. So CHG, if you do not know what that is, it's chlorhexidine [04:59:00] gluconate.

You it's important that you use a lubricant of some kind that's compatible because many of these patients who are undergoing bone marrow transplants. They have to bathe in CHG. A 2019 study and the journal blood by the American Society for Hematology revealed that 20 to 45 percent of inpatient transplant patients obtained a bloodstream infection during their hospitalization that led to prolonged hospitalization and increased mortality.

So one method of proactively trying to prevent hospital based infection is the use of a daily bathing with CHG. It's important for us as massage therapists to understand this because the creams or lotions that we use whether the patient is

in the hospital setting or private practice, they must be compatible with CHG if they're using that.

If they are using it, We're negating the benefit of their of protecting their immunocompromised state [05:00:00] if we are using items that are not compatible, so we don't want to put them at any more risk. And CHG is what's helping to prevent that potential infection as a good regular practice. My guidance in the hospital.

So if your goal as a hospital based practitioners is to work with your medical teams or like a hospital regulatory department to only order CHG compatible lotions or creams, then you don't have to worry about it. There are some oils on the market as well. That can be purchased for massage therapists who are working in private practice with clients who have undergone transplant, I would recommend having that conversation with a patient directly.

They're going to be able to tell you. If not, if they are still at home having to bathe with CHD wipes or wash on a regular basis, but still in your private practice, I would recommend that if you have patients that still have venous access lines or if, if, even if they're not, [05:01:00] admitted to the hospital is what I'm speaking of.

Have a CHD compatible lubricant available in your private practice and maintain that communication with your patient can be critical. So then you're, you know that you have something on hand to meet that need so that you're not negating that benefit for them.

When it comes to consent and communication you must be clear and help to establish a trustworthy relationship. Again, our therapeutic presence provides the foundation for that. Building trust with the patients is one of the absolute most important things that we can be doing as oncology massage therapists, because so much of what these patients are going through is confusing and complicated.

Approach the patient or client with a level of calm, and give them the time to express their concerns and to ask questions. If they, even if they're not related to your services, use honesty when responding, include referring back to the medical team. [05:02:00] And if they're asking you questions that are not related to your services, Help them understand that that's outside of your scope, but do what you can to try and provide someone who can answer their questions for you.

I, I think this is important, especially in the hospital based setting. I think most of us as massage therapists know that our clients. They feel trusted. They feel trusted with us. And so oftentimes they will talk with us more openly about their concerns or about things that they're trying to process.

And so Yes, you might be entering the room as a massage therapist, but it's important that you hear them, that they know that they've been heard, and if necessary, seek out a referral source or someone that you can put them in contact with, someone who's trusted. Remember too that oncology patients don't often feel that they have an opportunity to say no at any point in their care.

I, [05:03:00] this is, I think this is interesting in the inpatient setting in this clinical setting, where in my work, I don't know if a patient necessarily wants to be seen before I've seen them. I may go in because there's criteria that say to me, this might be a person who would be interested in having us come to their room and provide some kind of care and describe to them what we do.

But for this population, we're If they say no, it can really be empowering for them because they don't often have the ability to comfortably and confidently say no to anything else. So no matter how beneficial we feel our services may be, we need to open that door to them. To have the ability to say no, and yet maintain that trusted open dialogue with them so that they know that's not a forever.

No, they know that they can change their mind at any other time and go, Well, maybe I do want that massage therapist to come back. There's a lot of [05:04:00] empowerment in giving them that choice in an in a situation where they may not otherwise be able to do so. I do think that documenting Our sessions is really it's that it's vitally important.

I understand that there are some facilities who may not require this. And I'm not here to debate that. But I personally feel like I feel strongly that as a massage therapist, we're trained to document our sessions even with our relatively healthy clients. And that we really need to be documenting if we're working in a hospital setting or outpatient clinic this is our professionalism and it's how we communicate with other health care providers as well as with our patient about the work that we are doing with them and what we're observing.

So I really want to encourage you to, to be charting and The manner that we communicate our findings to our treatment it really, when we are [05:05:00] communicating this way, I really believe that it, it helps to legitimize us as

professionals within these medical care teams and with this population. And finally, I think I may have already mentioned this, but I'm going to repeat it.

I think it's really important that if we're seeing patients repeatedly over a long period of time, that we take the time each session to understand what their perspective is, what kind of difference our services have made to them since the last time we were together. And to always treat them as a new individual.

Each time we can develop a relationship with them, right? Relationship building is a really strong part of what we do as massage therapists, but from a fact based perspective, we really need to be treating them like a new individual each time and never getting so comfortable or too comfortable with their health status that we start overlooking the things that could be happening right in front of us [05:06:00] because we could be otherwise bringing those things to the medical team and, and really giving that patient quicker access to care.

So as we learn in foundational oncology, the importance of gentle touch when it comes to with patients who are in active treatment is paramount. This is not a sprint, this process of a bone marrow transplant, it is definitely a marathon and our transplant patients, they need gentle techniques for what can be a very long time.

So we want to make sure that we're using the gentle techniques for muscle tension that to improve circulation. And then we're using shorter and more frequent sessions, especially early on to prevent overstimulation. Swelling is very common for bone marrow transplants, especially those that have GVHD involvement due to inflammation caused by those tissues being attacked.

This is when knowledge on lymphatic drainage [05:07:00] as supplementary education can be very beneficial or have a trusted referral service resource. If either of those things are, are not in your scope if for lymph lymphedema support or just lymphatic, general lymphatic drainage, be very comfortable with a trusted referral source.

Regardless of the types of cancer, we want to continue to assess for that risk of lymphedema. It is entirely possible that a blood cancer patient, if you happen to work with that population like I do, could come in and could have had another type of cancer at some point in their life where they had lymph nodes removed.

So it's always good practice to continue asking that question, even with when you're working with a population who isn't typically going to see some kind of lymph node. Biopsy or removal, . Enhanced emotional wellbeing. I think it goes

without saying again, regular supportive massage therapy is going to enhance emotional wellbeing.

I think most of us who've experienced any kind of regular self care [05:08:00] whether that's through massage or any other kind of modality would agree that we're much better off when we're implementing those services for ourselves. Our bone marrow transplant patients. are no different. In this case, we may also want to acknowledge their loved ones and caregivers of our patients and offer to provide care when appropriate to them as well.

Here in our center, we really try and provide wraparound support for not just the patient, but to their caregiver that may be there. This is a really difficult time for them. And our caregivers are an extension of our patients. So we do what we can to provide support to them as well. And then improving circulation in neuropathy symptoms.

So we've not discussed but a brief mention of neuropathy up to this point. And for bone marrow transplant patients, this is a common concern. As a reminder, neuropathy is a nerve disorder. It causes pain and numbness. Swelling might have muscle weakness. Oftentimes burning, shooting [05:09:00] pain. But for bone marrow transplant patients, this can occur due to several factors.

So chemotherapy and total body irradiation are used before transplant can damage the nerves and that can leave to peripheral neuropathy. Additionally, there are drugs that are commonly used vincristine, cisplatin thalidomide. Those drugs are particularly neurotoxic and can lead to peripheral neuropathy.

GBHD of the nervous system can be cau can be a reason for this. Immunosuppressive medications those drugs that are used to prevent GVHD can cause neurotoxicity that can lead to numbness, tingling, muscle weakness, so things that you, a nurse or a patient might think, oh, massage therapist, maybe they can help with this.

Some nutritional deficiencies can occur and can lead to neuropathy. So, they may take in, have poor intake from their diet [05:10:00] during their treatment time. So that could lead to it. And then infections due to a weakened immune system can leave a BMT patient susceptible to viral infections, such as CMV, that's cytomegalovirus, or VZV, which is varicella zoster virus, and patients are often treated for those.

things. But both of those can cause nerve damage. So they're likely to already be taking medications to prevent these viral infections. But it's still possible that

you may see that also metabolic issues like if they have diabetes, electrolyte imbalances, kidney or liver dysfunction. Those can sometimes be worsened by transplant related treatments.

So that can also contribute to neuropathic pain. So there's many ways that neuropathy can be managed, including pain management medications, physical therapy, exercise, and managing the underlying disease. However, massage therapy may also help. [05:11:00] In my experience, BMT patients are most likely to see neuropathy in their hands and feet.

And this may not be symmetrical. They may have one foot, it may be a foot and a hand. The massage can help improve circulation, relax muscles, and increase range of motion. But you really need to discuss with the patient first before proceeding with any techniques. You need to be discussing with them if they find touch in these areas to be therapeutic or if it's painful because both can happen.

So we want to ease in. Do not assume a one size fits all approach. If you have a patient that reports neuropathy and that, oh, yay, I would really love massage. They, you want to ease into this very slowly, keep the lines of communication open and start with a pressure that's both comfortable and also working within the guidelines of their platelet levels that we discussed.

So just an ease in kind of a thing when it [05:12:00] comes to neuropathy.

# Massage Techniques and Modifications

**Shannon McKnight:** So massage techniques and modifications. These are some guidelines that may help you decide what kinds of supplemental education that you may want to pursue. If you haven't already done that within your career. Most of us start off with a gentle Swedish massage. That's what we learn. It promotes relaxation, reduces stress, improves circulation, right?

So I think most of us are, that's where we're starting off baseline. But with this population, we really want to avoid deep. tissue pressure, excuse me. And, and we want to really check those platelet levels due to potential bruising. So making sure that you're working within that safe zone lymphatic drainage massage it helps reduce swelling supports the immune function.

It uses a very light rhythmic stroke toward the lymph nodes. So again, on this, if you do not have the lymphatic drainage massage training. [05:13:00] I have minimal and I am perfectly okay telling a patient I do not feel comfortable with

this particular situation because I feel like you need a specialist. Make sure that you can refer to those particular professionals or consider continuing education.

Craniosacral therapy is another approach that can be used. It relieves tension and supports the nervous system using a light touch approach. I do practice craniosacral therapy as well, and this is a really relaxing technique that patients often enjoy. Reflexology for the hands and feet can be beneficial, especially I find this in our outpatient infusion setting.

So we provide massage therapy to those patients. They're sitting in their infusion chair. We come right into the room. We get them comfortable, warm blanket, lower the lights and have a little music playing. And then, you know, do a really gentle massage. Gentle foot massage with some reflexology, re [05:14:00] reflexology it can help stimulate circulation, help them relax.

But again, going back to what we just talked about with the peripheral neuropathy or any other sensitivity that they might have in those areas, work slowly and or communicate with a patient upfront about that service. To see if it's something that's appropriate for them. And then myofascial release, we want to modify that for fragile skin.

It can help with stiffness related to GBHD. And it uses a slow sustained pressure. We wanna make sure that we're avoiding any kind of. aggressive stretching. We never want to do anything that's that's vigorous or aggressive with this population.

Some special considerations for patients based on their bone marrow transplant complications. With acute GVHD, you're going to want to avoid massage of the skin if it's inflamed, peeling, or ulcerated. And with chronic [05:15:00] GVHD, you're going to want to use extra hydration. So making sure that you're using appropriate gentle creams and potentially even some hypoallergenic oils.

Obviously we discussed CHG and whether or not you, it's appropriate to use something compatible with that. Patients with peripheral neuropathy who have a numbness, tingling or pain in their hands and feet, again, start with a light pressure. Slow movements and then increase that as the patient in the platelets warrant patients with low platelets or bleeding risk.

So you're going to be using a really light touch. We, we have a scale here at our facility that we use. Anything less than 20, 000 is no massage. We divert to alternative modalities for that. We are always avoiding deep pressure. or

friction. We use Tracy Walton scale here and it's very minimal very minimal pressure in [05:16:00] this environment to protect the patient.

I will say, so we are not using a feather light touch for all low platelets. And I want to qualify that. Because many patients in our facility would statistically based on the scale be considered low platelet. So I want to qualify this because we can use light pressure that is not feather light. And still not be using deep pressure.

So make sure that you understand that scale. I highly recommend whatever process you are instituting either at your place of employment or within your private practice that you look at that scale and And use the appropriate pressure, but I wanted to qualify that feather light touch feather light touch.

I consider more like when I use a healing touch with my patients and they are in a no massage zone. And that would be more like just the [05:17:00] weight of my hands. And then patients with fatigue and weakness, just use shorter, but more frequent sessions encourage breath work or some kind of relaxation technique whenever it would be appropriate.

A lot of times with my patients, it doesn't even need to be a complicated breath work, but really just kind of encouraging them to just notice their breath and get comfortable. and be present with whatever service it is that you're providing. And then keep your session to if they're really fatigued, I would say within that maybe 15, 20 minutes timeline to begin areas to avoid or modify. So we're going to any deep tissue work and trigger point therapy is high risk of bruising and discomfort. That's an absolute no. If your patient talks to you, if you're seeing a patient in outpatient treatment setting and they talk about the deep tissue massage that they're going to receive over the weekend that they're so excited about, I encourage, encourage you to have a conversation [05:18:00] about risks with them so that they can have a better understanding of their, their therapist may or not.

May or may not be oncology massage trained. So maybe provide some education if it seems appropriate. Overstimulating the immune system. These are already immune compromised patients. So we need to be very delicate with that. So we're avoiding all vigorous techniques with our transplant patients. We are avoiding any sensitive areas or fragile skin using very light pressure if tolerated.

Again, going back to basics, never massaging over medical devices, steering clear of those and verifying where they are located. If you have a patient who

may not be removing their clothes, they may be staying, they may have a shirt on and outpatient infusion or have a gown on and they don't want to take it off.

Make sure that you're having that conversation and verifying them that. And then again, working on the abdomen during active GVHD or digestive issues. Just is an avoidance. Don't do that.

Session [05:19:00] structure and duration. So it's important to remember that these are general guidelines based on my training and experiences working with this particular population. So, start with shorter sessions that are no more than 15 to 30 minutes and then assess how the patient responds to that.

Have that conversation maybe afterwards at a convenient time about what the benefits were and how they felt. Often using a semi reclined or sidelined position for comfort. I've never having a patient on their chest. I think maybe once in my entire inpatient career was a person on their belly, and that's because they wanted that in their devices.

We're made that possible. The location. And then asking for real time pressure feedback is in sensation is important. Don't assume that they're going to tell you. We learned this early, early on many of us that sometimes patients are really afraid to speak up. So have that in that first conversation, [05:20:00] encourage them to speak up and give you real time feedback about how they're feeling in the moment, especially those first few times that you work with them.

Post transplant in the first zero to three months you know, I might see a patient for 15 or 30 minutes, one or two times a week, depending on how they're doing in the hospital setting and what they can tolerate. And then we can increase from there as the months go on and depending on the, on how the patient is progressing post post transplant.

So,

three to six months you can be doing. Longer duration, 30 to 45 minutes, and then maybe seeing them weekly or bi weekly, and then once they're six months post transplant, and they seem like they're stable, and they're doing well, maybe they're coming in, they're going to their outpatient clinic visits less frequently, they haven't had any significant complications, then you can discuss the possibility of extending their sessions to 45 to 60 minutes, and [05:21:00] how depending on their frequency is what they can tolerate after

the massage. We're going to encourage hydration. Again, we do these things already, but we want to really have them avoid any kind of caffeine or diuretic. We want to monitor for any reactions. So watching for dizziness. any excessive fatigue or any skin reactions that they might be having, especially if we're using a lubricant that's new to them.

And then if any adverse reactions occur, you really need to make sure that you're reporting that to your medical team immediately. And again, making sure that you're documenting the session, their response, the pressure tolerance and any concerns that they might have for continuity of care. Make sure that you're charting that so that you know how to approach this patient in the future.

So creating a long term plan, because again, these are patients that we may be seeing for quite some time in the first six months post transplant, we're going to be focusing on stress relief and gentle touch therapy. We're going to avoid the [05:22:00] stimulating deep circulation and any, anything that's too aggressive, and using other techniques like breath work and relaxation to assist.

support the emotional well being. Six months to two years incorporating the gentle myofascial release if mobility is affected. So making sure that you're finding that out there the patient may have some ongoing stiffness and scar tissue from any GVHD related issues. And then continuing with that lymphatic drainage techniques as needed as that might be helpful.

And then when a patient's about two years post transplant. Depending on how they're doing, depending on what their medical experience has been like, because again, this is not linear. This is a process and it takes time. You can then begin. Incorporating deeper tissue work I'm always really cautious.

I know I put deep tissue on here, but deeper tissue [05:23:00] with medical clearance and I've used caution there because I really believe that the tissue pressure is subjective and we always have to be really careful when we're using the term deep pressure. Because our deep may not be theirs. And so be, just use caution continue maintenance massage for overall health, quality of life, and encourage those self care practices.

# Special Considerations for Estheticians

**Shannon McKnight:** For a couple of moments, I want to switch gears and I want to address the role of estheticians and caring for bone marrow transplants, because I do understand that we have estheticians who may be present today. And they can also play a supportive role in the care of these patients by

addressing skin related side effects of treatment, promoting relaxation and enhancing overall well being.

And I think that this is really important too, especially as we explore the long term care of bone marrow transplant patients and how this can be beneficial. I want to qualify that [05:24:00] I am not an esthetician. I have received guidance from a trusted esthetician Carrie York, who is a part of S4OE, who has been pivotal in these information on these slides and helping me ensure that I'm sharing some beneficial information with you that is accurate.

So, common skin concerns that estheticians may encounter with in the post bone marrow transplant patient. So considering graft versus host disease and skin changes in those acute or first 100 days, you are going to look for skin rashes, redness, peeling and itching again, resembling a sunburn. So you're gonna want to use caution there.

And then in the chronic post 100 days that thicken, dry, or tight skin. You may see hyperpigmentation or hypopigmentation, and you may see some increased scarring and fibrosis. Chemotherapy and radiation side effects can cause extreme dryness and sensitivity due to [05:25:00] the damage to the sebaceous glands.

Skin can thin and it can bruise from long term steroid use. And patients may have photosensitivity that requires additional sun protection. We all should be using something, I'm sure, but additional sun protection. Delicate hair, scalp, and nail changes. So hair thinning or loss post treatment is very common.

So are brittle nails, cuticle damage, and scalp sensitivity and dryness.

How can an esthetician help BMT patients? So with your skin's skin care treatments, those really need to be customized for skin sensitivity, and then you can work into other concerns that they may have, predominantly dry skin. Use a gentle, fragrance free hypoallergenic product, and products that focus on deep hydration, such as hyaluronic acid, ceramides, and aloe vera.

Avoid any aggressive exposure exfoliation peels or harsh scrubs and make sure that [05:26:00] you're applying barrier repair creams for dry, irritated skin lymphatic drainage and facial massage can help reduce the puffiness or inflammation that can occur, help stimulate circulation with out over stimulating the immune system and avoid that helps you avoid deep pressure and prevent bruising as well for scalp and hair care.

Gentle scalp treatments such as soothing serums, sulfate free shampoos that are non irritating. And as far as scalp massage using a light touch to stimulate circulation. And I want to add here that you're always having that conversation with your patient about whether scalp massage is is something that they want.

We understand with this population that they are often losing their hair and so they may not be comfortable with scalp massage. So make sure that you have that conversation when you're first sitting down with them. Remember that if they do have hair loss they may run cooler sometimes. So even an application of lotion left [05:27:00] uncovered can bring a client's core temperature down.

So be mindful of that. Nail and hand care. Use nontoxic, breathable nail polish. Make sure you're moisturizing with nourishing oils such as jojoba and vitamin E. And you're avoiding cutting those cuticles because you want to avoid infection risk. And then gentle hand massages to improve circulation. As far as sun protection education that you can provide them, recommend a broad spectrum SPF that's greater than 30.

preferably something that's a physical sunscreen and educate the patient on UV protection for sensitive or GVHD affected skin.

Some safety precautions for estheticians working with this population, ensuring a sterile clean environment, making sure that your tools are disinfected, avoid treatments during any active infections when there's any open sores, or if there's a flare up caused by GVHD. Check with the patient's [05:28:00] medical team before providing services.

And I put this in red for a reason. Just because you've confirmed with their medical team doesn't make you safe. You need to know your role as a therapist and what you cannot do. So making sure that you're reviewing what is inappropriate for these patients and not providing those services. Modified treatments based on skin fragility, platelet levels, and overall health.

And then general contraindications for aesthetic treatments and GVHD are to open wounds, ulcers, or active infections. Do not work in those areas. There's a risk of infection with blistering or peeling skin. So again, you would want to avoid. Active rashes and flare ups. Wait until the patient's medically stable or there's a better understanding of what that rash was caused from.

And then use of electrical devices, you want to refer to whatever medical device company you're working with on what might be a contraindication for that. And then just within the [05:29:00] emotional and psychological support, provide

that calm spa like atmosphere for relaxation and gentle touch therapy really can help ease their anxiety.

Estheticians can make a meaningful impact on VMT patients by providing safe, soothing treatments that support skin health, self esteem, and overall comfort. Collaboration with oncology teams ensure that services are safe and beneficial. So I really want our esthetician friends to understand that there is a big place at the table for you when it comes to the treatment of bone marrow transplants.

transplant patients and I encourage you to look into more how you can incorporate that population into your practice.

# Summary and Takeaways

**Shannon McKnight:** So briefly before we finish up, I want to just go over some summaries and takeaways from today. So while we know that bone marrow transplants can save lives, they do have many challenges and I think we all understand that a little bit more today.

Massage therapy [05:30:00] and aesthetics can be a safe and effective supportive therapy. and play a vital role in symptom relief and overall well being for bone marrow transplant patients. We need to always remember to collaborate with our medical teams to ensure the safest and most effective care. And we always need to be using a safety first approach.

Our techniques need to be tailored based on fatigue and various other medical symptoms. Every person needs are different and ever changing. So individualized care is key here. Gentle and relaxing techniques work best. So leaning on your lymphatic drainage, light Swedish massage, craniosacral therapy, those kinds of things, and adjusting appropriately when you need to for platelet level.

Being aware of skin sensitivity and GVHD, avoiding deep pressure and circulatory overload, and just overall emphasizing holistic care. That we really, we're providing a physical service that also has a really [05:31:00] supportive impact on their mental, emotional, and physical well being. And then our long term survivors benefit from continued support for ongoing fatigue, neuropathy, discomfort, and stress.

I as far as additional resources for training and massage therapists, some things that I recommend any advanced oncology massage course that you can find may

go in a little bit deeper on this as well, or give you some more exposure if you're doing a hands on course, I do recommend lymphatic drainage therapy as well.

So that might be something that you want to put into your future supplemental training, hospital and palliative massage training. Energy therapy modalities, we use them quite a bit with our population here whichever you feel comfortable with. That's a nice adjunctive therapy reflexology also acupressure massage. Many of us may know some about that. So we do some of that for nausea, vomiting and headaches can be very helpful. And then also receiving hospital based massage [05:32:00] therapy training. Okay. If you have never worked in a hospital before and you have interest in that, I encourage you to look into our you know, some of our other partner providers or folks that are out there that are trusted resources on learning more about hospital based massage.

Just a couple of thank yous. We this slide. I just really want to officially thank some people who helped in collaboration of pulling this information together. I've been doing bone marrow transplant massage and care for about four years now. And the folks listed here have been super helpful. As I noted, Carrie York was very helpful with the aesthetic piece.

But Mary Beth, Sierra and Becky were pivotal and helping me reign in some very complicated information for this very special population. So I know that there is a lot of information that's been presented today, and I understand that the portion on stem cells and the transplants themselves may be very new to a lot of [05:33:00] you who are listening today.

But this information is really important so that we can be striving our best to understand what these patients are going through. While we've learned more about the lifesaving nature of these treatments, they are not without their challenges. And we as massage therapists have a unique opportunity to potentially see complications as they arise and provide relief relief when appropriate.

Though massage therapy can be a safe and effective supportive therapy, we provide a vital role in symptom relief. It's important that we better understand BMT complications that we've discussed today when we need to take additional precautions. And how we need to be communicating with our medical professionals and teams.

Again, I want to emphasize the importance of individualized care for each and every bone marrow transplant. And while there are a number of symptoms that can arise after a BMT, they can appear and change rapidly. So we really need to

be paying close attention to each person, each time we see them using that safety first [05:34:00] approach and using those gentle and relaxing techniques.

While BMT patients do recover and can begin to live a more normal life, massage therapy and aesthetics are going to continue to benefit long term survivors because patients may experience ongoing side effects. I want to Say thank you to everyone for listening today to all of our listeners.

Appreciate express my appreciation and love for this population. I look forward to your questions in the Q and a and hope that you've gained enough knowledge and confidence to embrace this special population that we serve. Thank you so much.

# Q&A Session | Therapy for Bone Marrow Transplant Patients - Supporting Healing & Comfort Through Touch with Shannon McKnight

**Kimberly Austin:** So our first well comment is, thank you for your knowledge and thoughtfulness and communication and understanding. Shannon, questions? If not, I will start it off with, what is bone marrow transplant and what are the common complications or symptoms associated associated with a bone marrow [05:35:00] transplant?

**Shannon McKnight:** Well, first of all, thank you. Can everybody, I hope you can hear me okay.

**Kimberly Austin:** Yep.

**Shannon McKnight:** this is just, population's a delight to me, so, I really am grateful that I had the opportunity to, present today. So you're welcome to those that have said thank you. I wanna tell you just briefly that my notes, because they are more thorough than the slides, Ashley's actually gonna be emailing those out to everyone after the, after the presentation and the post pre, summit materials, so you can expect more details in your inbox. back to your question, so, bone marrow transplants, we do those because patients have either a damaged bone marrow or the damaged, process of creating bone marrow and, so they're not creating these healthy cells. So, diseases like leukemia, lymphoma, are others [05:36:00] such as anemia. I've actually, had other

patients I've cared for who have ms. so what we're doing, the goal in the. to replace all of those, damaged cells with new cells that can then begin to grow properly. common complications, you've probably heard me many, many times in the presentation, talk about GVHD. is a really big one. you really need to be, aware of that.

Increased risk of infection. mucositis is a big one because of the mouth sores and sores in the throat. that becomes really difficult for patients to eat and drink. you might hear a lot about that. So be aware, fatigue and weakness, those are things I think common with all of our oncology patients, but particularly with bone marrow transplants.

And then the neurotoxicity definitely that I talked about, because that can be common and you'll wanna keep an eye on those as well.[05:37:00]

**Kimberly Austin:** Wonderful. And Renuka asks, what brands would you recommend as CHG compatible lubricants?

**Shannon McKnight:** I, my go-to that I actually recommended to our facility is a brand called Remedy. It's actually made by Medline. You can order that I think through Medline, or you can even get it online. So if you're a private practitioner and you're wanting to get that, you're our go-to Amazon, right? you can look online. there are a number of different options within their CHG compatible line, but I really like that. Now, I, what, what I want you to keep in mind though about that lotion as a lubricant is it's really effective short term. So 15 minutes, 20 minutes beyond that, it can start to pill if you're working in one area too long.

So, and we really don't do that a lot anyway, but in my outpatient environment, we do a lot of leg and foot massage. And [05:38:00] so sometimes I'll, I'll say, Hey, that's not your skin. That's, that's the lotion. So, but remedy of the, a brand that I really like, so I do recommend that. I

**Kimberly Austin:** Wonderful. Gigi asked, I've been taught that MLD needs caution with bone marrow transplant and lymphomas. Any new exciting research showing benefits versus caution or contraindication? I.

**Shannon McKnight:** can't speak to research on that because I'm not up to speed on, on that either. the, the big thing that I lean on with any kind of lymphedema, any kind of lymphatic drainage work is I. I really think it's important that folks not do that work with anyone who has any kind of lymphatic pathology unless you're properly trained. And there's a lot of, I, I

think it's a very big question as to what does that mean? What does what [05:39:00] trained mean? I, I have 12 hours of lymphatic drainage, education that I've done in, in my lifetime, and I feel comfortable doing any kind of lymphatic drainage work with someone who has a lymphatic pathology, a diagnosed lymphatic pathology. So if they have lymphedema, I will refer them. And I think that's the really big key piece here, because if you're doing C-L-D-M-L-D kind of training, you're getting that more in depth, hands-on. That's, that's a key. I really think that it's important for us as practitioners something to that degree, because it can be very, risky is that you're doing a hands-on training that someone who's very experienced has the ability to look at what you're doing and assess whether or not you're doing it appropriately. so it's probably the best way that I can answer that question for you because [05:40:00] I, I personally will, I'll work on edema if it's not a real, a pathology that I need to be concerned with. That does happen. I have patients that come in that they'll have some swelling, chemotherapy can cause that. but if they have lymphedema or if they have, a lymphoma kind of a diagnosis, I'm really gonna refer out. And that is something that is, is, by our medical director for the OSHA center as well. we've had some conversation about that. So feel comfortable knowing that you finding a good population that you can refer to to make sure you're practicing safely with that?

**Kimberly Austin:** How did you get your job at the hospital?

**Shannon McKnight:** well I started, the one I have now just kind of, it came along I, four years ago in 2000 and, 21 is the first time I stepped foot in a hospital to do this work. And I was in a pediatric [05:41:00] hospital locally and really got so lucky that my preceptor, who I was gonna be with for six months worked in bone marrow transplant. I had never been in the population before. I had never worked with them before. And it was like love at first sight for me. And I worked everywhere. I was a part-time person in the pediatric hospital, so I worked everywhere, which was great. And I love that because we've dealt with all kinds of patients there. but one thing, I work in an adult hospital now, and right around the time I was leaving my pediatric hospital. I reached out to our facility and said, would you, if you ever have interest, I, here's my resume, because I have been aging myself. And I started thinking about all the wonderful and beautiful things that we were doing for children, which are great, and they, as we should be. But I thought to myself, if this was me in my midlife, I would want this. I [05:42:00] would want to be cared for in this way. My life is not done. And so I reached out to them and said, I, if I'm interested in the adult population, if you ever have anything come up. And for two years we kept in touch because my, management knew that our blood Cancer healing center was in progress.

They had taken over a building, they were rehabbing it. And so I'm very, grateful that I got some hospital based experience. I think that if, however you can do that, if you're interested in working in a hospital, whether it's volunteering or, A PRN or get, get some kind of training, that would help you too. that that's how it happened. Really. It just grew from kind of one thing to another. And so I'm really grateful to be, the lead person in our current facility, with the, the knowledge that I've gained over the years from some really great people.

**Kimberly Austin:** Well, awesome. Shannon, thank you so much for your presentation. It's been very [05:43:00] informative. as of now, there's no more questions, so we are going to go ahead and introduce back Erica Clinton for our closing statements.

# Closing Statements and Future Plans

**Kimberly Austin:** Thank you, Shannon.

**Ericka Clinton:** Good afternoon everyone. Thank you so much for attending the Virtual Healing Summit presented by the Society for Oncology Massage and the Society for Oncology Aesthetics. What a great day this has been. The presentations were amazing, informative, and inspiring. We appreciate you all and hope you had a wonderful time with us.

To wrap up our day, I wanna let you know what's next for our community. First, the board is gonna exhale, and in about two weeks, we will begin planning for our next virtual summit in 2026 and our next in-person [05:44:00] summit in 2027. We will also be putting out a call for volunteers, so please watch your email if you are a preferred practitioner.

If you are not a preferred practitioner and would like to volunteer for our organization, you can send us an email to operations@sfour.org and we will get back to you about all of the volunteer opportunities. We would like to have at least two additional new board members in 2025 as our current leadership group will be transitioning off the board in the next few months.

Board members do not need to be preferred practitioners in the organization. And we as an organization really appreciate having professionals and educators from the fields of oncology, massage and aesthetics who are interested in the development of the [05:45:00] organization serve on our board. So all are welcome and if you're interested, please let us know. We will also need more volunteers to join us and help with Summit Planning to have great events like

this. Fundraising, which is always a necessity for a nonprofit organization. Research literacy, a new area. We are so excited to expand and marketing now onto the best part of the day, recognition. Big.

Thank you again to our sponsors, pram, essential Oils, and Heal Well, we could not have done this event without your support. Huge thanks to our volunteers on the Summit Planning Committee, who made this day possible. Nissa Valdez, who was the co-chair from the oncology aesthetic side, Sharon Pollock, who was the board [05:46:00] liaison, Kelly Joe Webster, who did great with our marketing and outreach.

And Lucy Allen, our N-C-B-T-M-B liaison. I wanna take a moment to highlight two very special individuals, Cheryl Johnson, who was also co-chair of the Summit Planning Committee on the oncology massage side. Cheryl has stewarded the Summit Planning Committee for the last three years, and she always sets us on a path for success in these events.

Her dedication to S four OM and S four OE is amazing and we very much appreciate her leadership and organization. And last but certainly not least, huge thanks to Ashley Hyatt, operations manager who oversaw registration and provided technical support for the summit. Without her hard work and commitment [05:47:00] this day would not have been possible.

Thank you again. Everyone, please be well and have a wonderful day.