Introduction and patient-centered cancer care

Well, Dr. Nalini Chilkov, this is such a pleasure and such an honor to have you on this segment of cancer breakthroughs. Thank you so much for for chatting with me today.

Absolutely. It's my delight to be here. Well, I mean, obviously, you know, people battling cancer. There's a lot of lot of challenges that they go through.

And then to kind of manage those challenges, that almost becomes one of the biggest thing, you know, while they're going through chemo, radiation or whatever it may be, you know, surgery.

So what are some of the main challenges that you see people having as you as you work with cancer patients? Well, that's a big question. So one of the things that I think it's really important for patients to realize is really my wish that this be sort of where people begin, when they get diagnosed.

But it isn't always, at that moment. But I really feel strongly that every patient should have a plan for their health and not just to plan for their disease.

And so you have you want to have the absolutely top best health experts on your team, but you also need a health, you need your disease experts, whether you're oncology team, but you need a health team also because you really want to have health as your outcome.

And in the oncology setting, the word health isn't really even in the lexicon. Like you don't talk about health and then oncology clinic, but that's what the patient wants.

That's what the family wants. And so I think it's really important from the beginning to understand how you're going to get through very challenging time and have your health be supported so that you can get through it.

Maintain a good quality of life and have good healing and good recovery. And then longevity. So we talk about not just life span but health span. And you have to have a plan for that.

And and on that note, I think that it's very important for the patient and family to understand that the patient is the head of the team. The oncologist is not the head of the team.

And the oncology setting itself is incredibly disenfranchizing and disempowering to the patient. So it's really important to advocate for yourself and to have a voice and to have relationships with your care providers in which you are values, your needs, your priorities are respected.

And if that is not so, you should shop around and get second or third opinions and really work with an oncology team that you feel comfortable with. Yeah, and that's the biggest issue you get.

So cancer focus you get so disease focused chatting and and so everything you're doing is just how are we going to attack this disease? How are we going to kill the cancer?

How are we going to get rid and not recognizing that there's more healthy cells and disease cells? Yes, yes. And they need to be taking care of. Yes. And because of the way oncologists speak to cancer patients, you think you're having an emergency.

But cancer is actually not an emergency. Cancer is a chronic illness. It is not urgent care. It's not emergency care. And you have time to get second or third opinions.

You have time to get your life organized, to get your kids covered, to get your business covered so that you can focus on your own cancer care and recovery so you don't have to be in a hurry.

I mean, you don't want to dilly dally around, but you have a month after your diagnosis to try to sort out the best path forward. It's an overwhelming amount of information that you need to take in that's not familiar, and it's emotionally overwhelming.

And so it's really important to take your time, take a deep breath, and make decisions that are thoughtful and not rushed. And it's really important. And how would you.

So we know kind of the medical side, you know, what will that team tend to look like.

Building a supportive health team

You know, what do you suggest for like the health team? I mean, what what what, you know, for somebody can of building that I mean, could you give. Obviously each individual is different and their needs are different, but can I give a kind of a broad example of what it should be?

Well, the first two questions everybody asks me are what should I eat and what supplements can I take. Right. And so you want to have somebody on your team that can answer those questions for you.

And, so you want to get clear about diet and, and when you get your treatment plan in place with your team, you want to have someone who's knowledgeable can tell you about each other, have nutrient interactions so that you know what's safe, that you can take, and you want to really think about, having I think like, that's enough at the beginning.

You don't want to be there's enough on your plate. But, you know, in the course of treatment, I really like to to see patients have acupuncture, but I'm biased in that direction because I do Chinese medicine also.

but also, I think it's nice to have some kind of therapy where you're touched in a healing way. And because cancer treatments, a lot of, series of traumatic events, one after the other, starting with maybe your first biopsy and then the news that you have cancer and then it's, an invasive kind of, series of treatments, typically.

And so it's nice to have some kind of bodywork or, or healing experience where it's nurturing and life giving and calming and relaxing because you need to spend some time in the parasympathetic rest healing state.

So you can integrate what's happening. And, and your body can start to organize itself and your psyche, your emotions can organize themselves. I think just being in nature, having time to be in nature, making sure that you have good sleep and have your you need support for having healthy sleep to have that, you know, cancer happens to all the people that are close to the diagnosed patient.

And so, whether that's your immediate family or your circle of friends or your church group, whatever it is, and that your diagnosis, your cancer experience happens to everyone around you and everyone, will be transformed by it.

And it's very important for you, again, to have a voice with all those people who love you and want to help you, because a lot of times they have no idea what kind of help you really need.

And they do all kinds of things that aren't helpful at all. So you have to have good boundaries and let people know what you find helpful, what you don't find helpful like that.

And so, your, your circle around you can be an incredible resource if that's just somebody to drive you to your appointments or pick up your kids from school, or do your grocery shopping, or you want to give a bunch of healthy recipes to friends who bring food, buy whatever, whatever it is.

you need that. Some people want to have spiritual counseling. Some people want to have, psychological and

emotional support. Some of the larger cancer centers offer that, and I think like yoga and meditation are great to do.

So all the things that are nurturing and life giving, whatever that is for you, pick something to have. That's an anchor place for you to sort of have a moment of peace in the middle of all this storm of cancer.

And so when somebody is diagnosed and they're embarking on, let's say, say, chemo or radiation, the kind of moving forward with a traditional oncology team, in addition to then work in on on the health aspect, can you walk us through kind of what that that journey, the challenges, you know, in that journey.

Yeah. And and what some of the, the tools that could be really beneficial as you're facing those challenges. So there are some really basic things to have in place.

So cancer patients have a pretty high need for protein because loss of muscle mass and which is called sarcopenia is a fact of cancer physiology. So you want to make sure that you're eating enough clean, healthy protein to not lose muscle mass as you go through treatments.

And there are days where you might feel nauseous or don't feel like eating. Not so interested in food. So you need a plan. I restrict, I don't I don't put people on vegan diets, but I want patients to be on a plant strong diet.

So you're getting lots of fiber and lots and colors to eat the rainbow. And it's important to have clean, healthy protein. I restrict red meat because we know that high iron foods can drive cancer metabolism.

And so I don't like people to eat red meat. We want to have hormone free, grass fed, free range wild caught proteins, and you need about 100 to 120g of protein a day, which is a lot.

And so it's sometimes hard to eat that much. And so I will put in, therapeutic protein shake into the day. And sometimes people will have two of those because they don't really feel like eating.

And so that's a strategy. And you can then have protein and some fiber and some, like a greens powder in there to get your plant chemicals. If you don't feel like eating a lot of food on your chemo days for example, and put some healthy fats and oils in there as well for calories, for inflammation control.

Nutrition, protein, and supplement basics

And so, you can sort of have a meal in a blender sort of thing, and you don't have to drink it all at once either. You can just sip it over the day or over a few hours.

I also like to add carnitine, which is an amino acid, to that shake, because, that really helps with loss of muscle mass and preserving and building muscles.

The other thing that, carnitine does is it really supports the mitochondria, which is the energy powerhouse of the cell. And so most cancer physiology is has mitochondrial, compromised mitochondrial inefficiency.

And so cancer related fatigue, cancer treatment related fatigue is a common complaint. 100% of people will complain of some level of fatigue. So thinking about mitochondrial health is a way to support that energy.

So enough protein, enough B vitamins and enough minerals, those are really important. So a good multivitamin that is designed for cancer patients. So that would be, a multivitamin that has methylated B vitamins in it, but is free of iron and free of copper because iron and copper drive cancer cell metabolism and can drive disease progression as well.

So you want to look for a copper V iron free multivitamin with methylated B vitamins. And then a really good, multi designed for a cancer patient. It will also be free of tocopherol, which is a form of, vitamin E.

And instead look for one with toko tri animals in it, which actually are good for cancer. Cancer health. And also we usually, remove boron from multivitamins in patients who have estrogen driven cancers.

So there are a couple of companies that make multis like that. You want to look for that. And then, looking to, support inflammation control because cancer itself is an inflammatory disease syndrome.

And the cancer treatments are very inflammatory as well. So, take having enough omega three fatty acids is really important. So that would be your fish oils primarily.

And I usually give somewhere between 2000 to 4000mg day of, of those. that's really important. So, those things kind of get, get the bases covered and a good probiotic because we know that having a healthy microbiome supports normal immune function, supports inflammation control.

But we also know that when you have a healthy microbiome, you get a better response to chemotherapy and a better response to immunotherapy. And you get less, complications from surgeries.

If you have a healthy microbiome. So that's just like some basics that need to be in place. And so one of the challenges is always when you go on this journey as knowledge, you know, being able to eat, you know, are there certain tools that that's available that, you know, people can consider, you know, when they're dealing with that?

Yeah. Because, you know, you're talking about sarcopenia, needing to kind of keep nutrients in. And here they're having a really tough time being able to eat.

So what are some of your go to set to use. So first of all a lot of our patients try to take no drugs. Right. But there is a place for managing side effects with medication that's appropriate. So nausea is one of those.

So if you're receiving a treatment that causes intense nausea, my recommendation is to take the nausea medication as directed for at least three days.

That's my my recommendation because then you can eat and drink normally. And being nauseous all day just ruins your dad's terrible quality of life issue.

But it it would allow you to stay well-hydrated and well nourished. If your nausea is well managed. And generally after a, chemotherapy infusion. that's that's what causes nausea in cancer patients.

Typically it doesn't last very long in most patients 3 to 5 days. And the worst is right in the beginning. And there's generally anti-nausea medication in the infusion.

And so you don't have know immediately. But when you get home you need a plan. And so my recommendation stay really well hydrated. One of the things I actually like people to do is actually drink fluids during their infusion.

And that's very helpful, for the nausea. But also it helps to protect the kidneys and the liver and the heart and, the nerves, which, suffer the toxic effects of concentrated drug being in your system.

So you want to keep drinking while you're having your infusion. And so I think bone broth is a great thing to drink during an infusion, because it's got fluid and electrolytes and some protein in there.

And it also has, some collagen and glutamine in there to heal the lining of your gut, which gets eroded by a lot of, chemotherapy agents. If you're vegetarian and you don't want to do bone broth, you could certainly do vegetable broth and get fluid and electrolytes.

The other thing that, chemotherapy depletes is magnesium. So I like to make sure that people get extra magnesium and primarily magnesium glycine aid. It's the best choice to really support tissue storage of magnesium, and that keeps you from feeling fatigued.

Also because magnesium is really important to the mitochondria. back to nausea. When the, the, most powerful and simple thing to do is to take ginger.

And so there are some supplements companies that make ginger oil capsules not ginger powder capsules, but ginger oil capsules. And they're rich, really powerful.

And the anti-nausea drugs, bind to a receptor in the digestive tract that is the same receptor that ginger binds to. So it works by the same mechanism.

But any herbal medicine is going to have a shorter duration of action than a drug. So you just have to dose it more often. So I'll have people take the anti-nausea medication for one, 2 or 3 days.

Some people feel nauseous for five days, but not most people. And then try to wean yourself off the anti-nausea meds and then introduce the ginger oil capsules, and you can take them 1 or 2 capsules every few hours if you need to.

There's no toxic dose of ginger and ginger so wonderful for digestion in general, and it also helps with moving peristalsis and moving gas and enhancing digestive function as well as having anti-nausea activity and has a mild, tumor control, qualities as well.

And so you can just take that as needed. And I just tell people, modulate your own dose, figure out if you need 1 or 2 capsules, if you need to take it every four hours or every two hours, and just managing nausea till it it's, it subsides.

And and also you have notches it's sort of like a homeopathic. You like as well because I know well. You know, I'm a classical homeopath so we don't manage symptoms but we don't prescribe by symptom.

But the typical go to would be something like nux vamika, which is for drug toxicity. It would be, like you can use that for anesthesia detox as well.

So I would give that like an, a low potency, like a 60, and take three pills under the tongue. you can take that once or twice a day, during those first few days as well.

Managing nausea and treatment side effects

And that helps clear out your liver from the, the, toxic drugs. That's often the cause of the nausea in patients who are, receiving, like, patients who have cancer as a chronic illness and are living with cancer long term.

They often are on long term chemotherapy. And so they can be nauseous a lot. So I'll keep them on ginger. And, sometimes I'll give them next vamika as a, as a hobby of having.

and then caring you when you go through this journey, I mean you always have I mean it's such a mental game for the patient, you know, and kind of going through that and, and with that you have the, your, your kind of, your energy level, your vitality level, you know, how, how much you're able to engage with your family and do the things you're normally able to do.

And, and that's so important for just your mental well-being as you go through this. So talk to me a little bit about that. You know, are there strategies around that.

And also obviously we have post chemo, you know, to the recovery from all of that. So one of the things I think is really important is to feel as the patient, to feel that you can have an impact on your well-being and on the trajectory of your journey.

And so that gets taken away from you in the oncology setting. So to have a toolbox of things that you can do, the supplements that I recommend the Shaikh.

But you know a lot of cancer patients go can I exercise. Is it okay if I exercise. You should absolutely exercise. So it's good for, for your sense of well-being.

It's good for your circulation. Cancer patients have a a 40% higher risk of a blood clot or an embolism, which could give you, a stroke or obstruct your breathing.

And so if you move and stay hydrated, you're going to lower your risk of that. but, exercise is so good for your mood. It's so good for your immunity.

It keeps your bowels moving. It's good to get out in nature and and, breathe and look at the sky and be in your body. But there's a lot of studies that show that people who exercise have a dramatically decreased risk of recurrence and also have, decreased side effects and better sleep, of course, as well.

And so I think it's all important to sort of feel like your life is close to a life you recognize as well. And so if you if you're very fit near exercising a lot, then you just listen to your body and, and don't overtrain, you know, in Chinese medicine we say be careful where you spend your tea.

Be careful where you spend your life energy so you don't want to overtrain you don't want to come become depleted. But if you're already fit and you exercise a lot, then you should continue to exercise.

But listen to your body after you have a surgery or after you have a, chemo infusion. You might be tired for a few days or rest, but you don't have to be a couch potato and you don't have to be a convalescent.

You should be active. You should be moving. And also, when you're getting your infusion and your chemo infusion, you should not sit in the chair for hours and hours and hours and hours. You can get up and walk around.

You just walk around with your bowl. And, some people bring their laptop and stand up and work on it, but you know, you're not prisoner to your IV in your chair.

And so you should move. You should definitely move. Exercise is super important. and I think also some people get really socially isolated when they're going through cancer or feel that nobody understands what they're going through.

So depending who you are, you know, you should invite people over so you don't feel isolated or have zoom chats or phone calls. And also I really recommend like there's usually a lot of people around who want to help and and and be supportive.

So you can assign a different friend or family member to a different day of the week. So everybody's on call on Sunday. And so then, you know, every single day somebody is going to check in on you and you'll have someone to talk to and tell you that they love you and care what's happening or can do anything for you or whatever to think about that.

There's a website called Caring Bridge, which is designed to get all this organized. And so if you want, you know, someone to drive you to your appointments or you want to send the news out what's going on in you and have to answer 20 emails, you can post it on this site and it's completely free.

And so something like that, or a friend or family member can organize that. And so, those types of things, in terms of, fatigue and energy, sleep and exercise and hydration and adequate nutrition, just the basics are important.

But there's a lot of research on both Asian ginseng and American ginseng and cancer related fatigue. And there's very few interactions with drugs with those.

And so it's quite safe. I generally give anywhere from 1000 to 3000mg a day of of ginseng for fatigue. And and that's quite safe. You just want to make sure when you're using herbs and supplements that you're using professional quality and that you're you, are educated as a consumer where to purchase and using,

uncontaminated, high quality supplements.

So to me. Yeah. And those. Yeah, those, those, like the ginseng. So I mean, they're just fantastic. You know, when you're dealing with stress to, to help, you know, they're these adaptogens, so they help to deal with these kind of changing stressors in your environment, supporting your adrenal function, obviously, which is are the glands that deal with stress.

So, so they yeah, they're fantastic tools. there's certain nutrients that that you feel, you you mentioned magnesium and other other ones in regards to an energy, that that becomes really important as well.

Well, I tend to use Chinese herbs when we're talking about fatigue and energy. You know, certainly you have to have enough calories in a day not to be tired and enough protein and healthy fats.

That's really important. And your B vitamins, those are the most important. but I do like to use adaptogens quite a lot. And they're you know, there are companies that make wonderful formulas.

I think you have to be a little bit careful, though. Some will tend to have can have herbs that have hormonal, influence. And so you want to have some guidance when you select, a formula.

But something that has, ginseng rodeo. those are great herbs. Siberian ginseng. and be careful with ashwagandha. It's in a lot of adaptogen formulas. But does have hormonal influence and has indicated if you have a hormonal cancer.

I, I, I think that it's really important to, include Chinese mushrooms because they're so good for vitality and energy. They have exert some tumor control.

They also have anti-inflammatory properties. They also help to regulate blood sugar. And so the only contraindication to using Chinese medicinal mushrooms would be if you're on immunotherapy or if you have an auto immune disease, because anything that is, immune stimuli, it can increase the side effects of immunotherapy, which is an immune stimulating therapy.

And or if you have a history of autoimmune disease where your immune system is overactive already, you need to be careful. So, in terms of the Chinese mushrooms, the safest would be get a derma regime mushroom, which also has significant anti-inflammatory properties.

So, it's a little bit safer, in that context. And it also historically used in China by the Dallas for meditation and spiritual development as well.

Energy, exercise, and emotional support

And so for people who are interested in nourishing that part of themselves, that's also a nice, quality of, again, the derma mushroom. And the dose is about three grams, 3000mg a day.

And so it's kind of continuum mushrooms. So a little bit as they're a kind of strategy with you mentioned the Ghana derma. the rice as their strategy, where you kind of rotate them, you do certain ones for certain type of cancers or doesn't matter.

Not so much. I mean, here are some, there are some that have more gifts leaning one way or another. So for example, lion's mane is Chinese mushroom. That's really good for the brain.

So cancer related cognitive impairment, memory changes, changes in thinking function clarity, executive function, sorting, decision making, organizing your mind.

Lion's mane is very good for that. And both cancer and cancer treatments can, increase brain inflammation and impact our cognitive functions. So the main, mushroom that we use for that is lion's mane.

And, so that's a wonderful thing to use. the, Mushroom Coryell is that that's turkey tail mushroom that has some antiviral properties. So if you had a cancer that was, driven by a virus, like, say, something like, a lot of the leukemias, have a viral component you might want to consider using Coriolis to beat down mushroom.

there's been a lot of research in Japan and China on cordyceps and, so it's very, very potent and powerful immune stimulant and, exerts a lot of tumor control.

And in that vein, although it is not a Chinese mushroom, the, the root astragalus root is one of the most widely used Chinese herbs, also very safe, very few interactions with drugs.

And astragalus root is, a very potent G tonic. So for, for vitality and energy. But it has a lot of anti-tumor activity. But it's also widely used when patients have the side effect where they're white blood cells.

And neutrophils have become too low as a result of the bone marrow being damaged by chemotherapy. And so there's a lot of studies on astragalus, as well as the Chinese mushrooms on, restoring the bone marrow function and your, your white blood cell and neutrophil counts, which are very important to immunity.

Yeah. And that's that's a big challenge as well obviously is kind of keeping the white blood cell count up their lymphocyte numbers. you know, so that you have an immune system to, to battle with once once you're off of the chemo and then the the mushrooms, it sounds like are really powerful tools through that journey.

Yeah. And acupuncture is so fantastic for restoring bone marrow function. And there's a therapy in traditional acupuncture called moxibustion, which is, therapy where you warm up or heat the acupuncture point.

And I actually teach patients how to do this on two points systemic 36 and large intestine four, where you can just worm the point up with the tip of an incense stick at home.

And that really stimulates the bone marrow and keeps your cell counts up. So you can, you know, you can do acupressure on those points, but the heat really is as more powerful.

And so, that's one thing that I do. And, and today, you know, historically before there were drugs tests to stimulate the bone marrow, patients had very severe infections as a complication of cancer treatment.

But that's no longer true, because if you're if your, cell counts are really, really low, you can have medication to keep them up so that you're not at risk of infection.

So again, there's a time to use medications. And and then, you know, if you have an extreme situation you need medication. If you have a mild situation you can use natural mints.

Yeah exactly. And it's it's having the wisdom to be able to know when to do what. and that's why it's important then to have, you know, people on your team that can, guide you.

Right? You can be, you know. That's news aspect. That's the other thing is a lot of patients in our world will also decline pain medication and, I really encourage patients to be compassionate towards themselves and manage their pain wisely.

And you can meet with a pain management specialist. So there are times like after a big surgery where you need to rest after you've had a big surgery, and if you're in pain and can't rest.

And so, you know, for a finite period of time, use the pain medication and then you will more readily be able to get off of it because you'll feel better, because you can rest and eat, because you're not in terrible pain, but also the brain learns pain pathways.

And so if you actually have a drug where you don't perceive the pain, your brain doesn't learn pain. And so it's also important. So you have to to have this talk with patients who are purists and, and think that, pharmaceutical

medicine is the enemy and it's not the enemy, it's just another tool.

And, and you have to understand when it's the right tool to use. And then, you know, like you're talking about to balance that out then with nutritional intervention to support the body while you're then using some of these pharmacological interventions at the same time.

Yeah. Well in cancer pain is bad, surgical pain is bad. And and I think what people don't understand is there's not an equivalent for everything in natural medicine.

And so, you want to make an appropriate choice so that you absolutely do your very best that that's really it's, it's it's better not to be an ideologue.

It's better to be a pragmatist in this environment, I think. Yeah. That at the, I mean, at the end where we're going for the long game. That's right. Yeah. That's right, that's right.

So there are a lot of strategies that once you go through the, you know, using, you know, pharmaceutical interventions for certain things.

Fatigue support with herbs and mushrooms

And as you then move through the acute state, you can then bring in nutritional intervention to help them recover from some of the pharmacological. So yeah.

But let's talk about some of the more common side effects. You know, that people need to to address because there's really some very simple things to do.

So a lot of chemotherapy agents really disturbed the digestive tract. So, sometimes, the stronger agents will actually cause the lining of the digestive tract to be damaged, and then you get diarrhea, and and so you need to repair that lining.

And so, bone broth is one of the absolutely best things for that because it's rich in glutamine. or you can take glutamine powder, for a couple of days and quickly repair the lining.

Or if you get mouth sores, and that's the lining of your digestive tract at the top of the the system. And so you can make a little mouth rinse out of a quarter of a teaspoon of glutamine and a little bit of water and hold that in your mouth for a minute, and do that a couple of times a day and it'll repair the lining.

Also, you can take a capsule of curcumin and, and mix it out with a little honey and put that as a paste on the inside of your mouth and that'll, dial down the inflammation and and support repair in the mouth.

if you have, if you're getting an infection in your mouth, like, sometimes you get radiation in it, that sort of damages the immune system in your mouth.

And you can get a fungal infection in your mouth or at little mouth ulcers. You can spray, colloidal silver in your mouth as well. And that helps to, to decrease some of the, in infectious organisms and do that a couple of times a day because it's short acting and then follow that with some glutamine for repair.

And I've had patients who, had in that cancer patients who are having radiation. And a lot of times, those patients can't eat during their therapies. I've never had patients who can't eat during their therapy.

So it's really, really important if you just take care of it. so you can do some simple things like that. some people will get, from chemotherapy, will get acid reflux from, from the chemo or a kind of an erosion of, lining of the esophagus or the or the stomach.

And then that makes you not want to eat as well. So the bone blocks very helpful. But you can also drink aloe vera

juice like in just a tablespoon at a time throughout the day.

And that'll help heal and repair the lining. And that's really important. You can chew on, deep listening to licorice chewable tablets. And that also will coat the lining and, and a support repair.

And these, these linings they repair quickly if they have the right conditions. And so that's really important. But you have to have enough protein to repair anything.

So you have to stay on top of your protein intake. we talked about nausea. If you have diarrhea then, the diarrhea that comes from chemotherapy is because the lining is inflamed.

So the the best thing is to try and heal that lining, which I just mentioned. If you're constipated, on the other hand, then, the safest thing to do is to use magnesium citrate powder to simply soften the stool.

And magnesium works by pulling water into the intestine. So, get, powdered magnesium citrate, take a heaping teaspoon, put it in eight ounces of water.

And, some people do that at bedtime, and then you wake up and have a bowel movement in the morning. And as if you've had cancer, where you get, obstructed, where you have a risk of obstruction because there's scar tissue around your intestines, like ovarian cancer patients in colon cancer, patients can have a narrowing or a loss of of, flexibility of their intestines if they get constipated or obstructed, then you want to keep the stool soft.

And you can do that by using magnesium. It's really safe. There's no toxic dose of magnesium in that way. And so if you take too much use to to loose, then just back off on the dose.

If it's not enough, you can go up quite high and and take a nap that it'll work for you. And you can sort of feel safe figuring out the right dose of magnesium citrate powder for yourself.

In that way, there's a very common, chemotherapy called five f you and that, causes a, syndrome called hand foot syndrome.

Bone marrow support and pain management

And that is helped by using the active form of B six, which is called paradox of five phosphate, and usually just 50mg once or twice a day will, reduce that.

And that means that your fingers and toes don't hurt and your skin doesn't heal. for neuropathy, that's a common, side effect of chemotherapy. I generally will use, high doses of the omega three fatty acids, as well as, alpha lipoic acid.

even better. Stabilized, are lipoic acid, but you don't do that concurrently with, chemotherapy because it will interfere with the chemotherapy. You have to wait till after the chemotherapy.

drug effect has passed. So you have to be guided when you're using certain things. So if you get a chemotherapy infusion, usually the drug effect lasts for 4 or 5 days at the most.

Then by day five, you can start using other things that potentially could interfere with the drug. acupuncture is really fabulous for, neuropathy as well.

There's, we used to give a c l-carnitine and you'll see that in some older published materials, but newer research has shown that it actually is not effective, and it can actually make non apathy worse.

So, we don't we don't use that anymore. And glutamine is also very good for nerve repair. And there's a lot of controversy about using it being in the cancer setting because some cancer cells can change their metabolism instead of using glucose values, glutamine.

And so people think if you give glutamine therapeutically, you're going to drive cancer. But that is not true because glutamine is the most ubiquitous amino acid in the body, the muscles are a storehouse of glutamine.

And if the cancer cell wants glutamine, it is there. And so using a little glutamine therapeutically is not going to drive cancer, but it can repair your nerves.

It can repair the lining of your back. And so, glutamine is actually used in hospitals like. Yeah. No, I yeah, I use that a lot for a yeah, that, that, for that neuropathy aspect on the gut aspect and the mouth and all of that.

Yeah. That's a it's a fantastic tool. And people just do so much better. You know when, when they're on it. well yeah. Going through chemo the but I would touch upon this a little bit, you know, the brain fog aspect.

Yeah. Which, you know, the, the chemo brain, which is so frustrating for for patients. can can you address that a little bit as well. So there's two aspects of that that need to be addressed.

So the first aspect is that the blood brain barrier gets damaged by cancer physiology and also by, pro-inflammatory treatments. So that could be chemotherapy.

That could be immunotherapy. So in the blood brain barrier is just one. So thick. And so it's easily breached. And so when that happens there's a flood of inflammatory molecules that enter into the brain and inflame the brain.

So it's a problem of the blood brain barrier. And it's a problem of brain inflammation. So you have to think about what crosses into the brain in terms of our natural remedies.

And so curcumin crosses into the brain as virtual crosses into the brain. green tea, catechins EGCg crosses into the brain as well. It crosses into the brain.

So my favorite to use is actually boswellia Yeah. For brain inflammation. And I actually work closely with a neuro oncologist that gives all of his patients 3000mg of boswellia that day.

Digestive issues, neuropathy, and brain fog

And, and, instead of giving them steroids, it gives them boswellia It's fantastic. But it also has antitumor activity. And, so I'll start with that and I'll start with 1000mg three times a day of boswellia And you better to have both with boswellia as well as curcumin, a fat soluble form.

So that would be a gel cap that's got oil inside of it. And so those are the best forms. Curcumin is widely used for, for inflammation in the brain as well.

And so again you could do 1000mg of curcumin and 1000mg of Boswell. Yeah. And those are excellent for brain inflammation as are the omega three fatty acids.

But even more powerful are the properties of the mediators like the DSPM that they're quite expensive. But they work really well. So I'll use those. but the blood brain barrier is actually well repaired by melatonin, which is also a powerful neuro antioxidant and also powerful for, altering tumor cell metabolism. So, the the research on melatonin in this context is done at 20mg, which is really not a very high dose.

It sounds like it because we use 1 to 3mg for sleep. But when you get, in these higher doses of melatonin, you're not using it for sleep. You're using it as a super antioxidant or as a metabolic treatment for cancer.

And so, 20mg is, is, quite a safe dose. And so I'll start there and you take that about an hour before bedtime. We want to stay with the normal biological cycle of melatonin, which is a dark signal to the brain, but it's not a sedative.

People think that if they take a lot of melatonin, they're going to feel sleepy. But you should not just maybe it's just a it's just a dark signal to the brain whether you take a milligram or 20mg.

And it's very powerful. So very, very, very powerful. So, that's a simple thing to use. But Astragalus, which I mentioned earlier as, immune and bone marrow tonic, also repairs the blood brain barrier.

So what I like to talk about, you know, things that are multitaskers that we can use in many different ways. And so you don't have to take 30 different things.

And resveratrol also crosses into the brain and works as an antioxidant in the brain. And also to protect the DNA, repair the DNA in the brain. We know that resveratrol will protect your telomeres, which is a strategy for protecting DNA.

And so that's why it's, a longevity, herbal medicine. Well, Dr. Chilkov I know we can we can chat for a long, long time, but this this this is a I think this gives a good foundation, a good starting, you know, launching pad for people, you know, battling, you know, going through the, the cancer therapies. So.

Thank you So much for spending some time with me. You're welcome. Thank you for having me. Thank you.