Protecting Oral Health During Cancer Care

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Deborah Litwak: Thank you for joining us today for tonight's webinar, Protecting Oral Health During Cancer Care with doctors Abida Taher and Dr. Ariel Blanchard. I am Deborah Litwak, Sharsheret Southeast Region Director. I want to give a special thank you to tonight's sponsors, the Cooperative Agreement 240061 from the Centers for Disease Control and Prevention and to Merck. Before we start a few housekeeping items, today's webinar is being recorded. Faces and names will not be part of the recording. It will be on Sharsheret's website along with a transcript. If you would like to remain private, you can turn off your camera or rename yourself, or you can call into the webinar. We also have closed captioning available. To display live captions on your screen on the bottom bar, click on captions and then click on show captions. You may have noticed you were muted upon entry. Please keep yourself on mute during the call.

We received many, many questions in advance of tonight and we will hold a Q&A after the presentations. If you do have questions during the program, you can type them into the chat box, you can send them directly to me, or you can just put them in and we will try and capture them.

I want to remind you that Sharsheret is a not-for-profit cancer support and education organization and does not provide any medical advice or perform any medical procedures. Our full medical disclaimer is in the chat box now. I want to highlight two upcoming programs. First, Sharsheret, we just started sort of in February, I think with this, offering monthly virtual support groups for those personally affected by breast cancer and ovarian cancer. We won one group for those in survivorship who were diagnosed with stages zero to three, one for our Embrace community, those living with metastatic breast and advanced ovarian cancer. And starting in August next month, we will have a support group for those newly diagnosed with breast cancer or ovarian cancer in stages zero to three or in active treatment, planning for surgery, chemotherapy, and/or radiation. The signup link is in the chat for that.

Okay. I also want to call attention to next month's double two-part series of webinars on the risk of recurrence. The link to register for the first one is in the chat. Most importantly, if you are currently facing a breast cancer or ovarian cancer diagnosis, please know that Sharsheret is here for you and your loved ones. We provide one-on-one emotional support and other programs and resources designed to help you navigate the cancer experience. Everything is completely free and confidential, and our contact information is in the chat box.

Now onto tonight's webinar. At Sharsheret, we know that cancer is more than a diagnosis. It is a journey affecting the whole family unit. Whether you're living with breast or ovarian cancer at elevated genetic risk or supporting a loved one who is, tonight's webinar is designed to offer practical advice on protecting your mouth, teeth, and gums from the side effects of cancer treatment and why these things happen. Again, we receive many, many questions. We invite you to

write additional questions into the chat box to me privately or just into the box. And firstly, it is my pleasure to welcome Audrey to the screen to share her story.

Audrey: Thanks so much, Deborah. So first I want to say thank you to everyone at Sharsheret for all the help I've received over the years. I was diagnosed with breast cancer in 2022, and a family friend of mine told me about this organization and it was incredibly helpful to me through diagnosis and treatment. And I had a mentor. I'm now a mentor, which has been really meaningful. And my daughter who was seven when I was diagnosed was sent a care package with a stuffed animal that she still sleeps with every night. So just on that note, I want to say what a wonderful organization. On the note of oral care, this is actually a topic when I was talking to Dana earlier last week, I guess. I think it's great that this topic is being featured because when I was going through chemo back in 2022, I would say this was actually one of the most significant side effects that I experienced and one of the most significant challenges to my quality of life.

And no one really talks about it very much and there's not a lot of information. But I will say going in, my oncologist did tell me to have full cleaning before chemo, which I did. And essentially what happened was during chemo, which of course kills all kinds of fast-moving cells, it was really difficult on my mouth and I had pretty severe mucositis for a couple of months. I lost my sense of taste. It all returned, so don't lose help. It did come back. But I also found it very challenging to brush my teeth because I had a lot of bleeding and open sores, which is an infection risk. And I really searched for ways to try to ameliorate this. One was, of course, sucking on ice cubes during the chemo treatment themselves to try to numb your mouth so that not as much of the infusion gets into your mouth. It's kind of the same idea as a cold cap.

And that worked, or drinking very, very, very cold water, that did work to a certain extent. Another thing that really worked well for me is swishing with warm water and baking soda. That helped keep my mouth clean too when I couldn't really clean it very well with a toothbrush and I couldn't floss for a long time. And it was one of those things that people don't ever ask about because they never think about it. You have the stereotype of losing your hair, which I did, but the mouth stuff was tough because it's really awkward, it's painful, and it also affects how much you can eat. And I would just say to anyone approaching it now, maybe if you're going into treatment, just know that it does resolve itself. You do end up having your sense of taste restored, your mouth heals. As painful as it is, it definitely, when I was talking to Dana about it does seem like a very long time ago, but it was a big deal at the time.

Have patience with yourself, cut yourself some slack, drink really cold water. I actually had a friend give me a Yeti tumbler, a stainless steel that I filled with as much ice as I could stand. That was very, very helpful to just sip really, really cold water all the time. Sugar I found really irritated it. Any kind of anything, salt, but really sugar was tough. And then later, as soon as you really feel up to

it, I would go back to the dentist and make sure every... I did end up having to get some cavities filled.

But now I'm okay. Things went back to normal. And as they said it would, but it is a challenge and I would give yourself some grace, have those supplies ready for yourself going in and just know that it's not you. I felt weird about not being able to really brush my teeth very well, but I just couldn't because there were too many sores. So we got through it and I think you end up looking back and seeing how far you came, but it's always good to go into it forewarned. The other thing is if you can tolerate it, the Arm & Hammer baking soda toothpaste is pretty good, but it is just something to keep in mind and be careful about.

Deborah Litwak: Thank you, Audrey. Thank you so much really for sharing your hopeful story, for offering to have patience with yourself and to be prepared. But I appreciate your words immensely. Our first presenter this evening is Dr. Ariel Blanchard, program director of the General Practice Dental Residency and an Assistant Professor of Surgery in the Division of Dentistry, Oral and Maxillofacial Surgery. She is also the assistant attending surgeon at the New York Presbyterian Hospital. She received her dental education at the University of Medicine and Dentistry in Newark, New Jersey. In 2014, Dr. Blanchard completed a one-year fellowship in dental oncology at Memorial Sloan Kettering Cancer Center, followed by a three-year oral and maxillofacial pathology residency at New York Presbyterian Queens.

After completing this residency, Dr. Blanchard returned to the clinical practice of general dentistry, oral oncology, and the clinical treatment of oral and mucosal diseases. Dr. Blanchard joined Weill Cornell from Bellevue NYU where she was a clinical assistant attending and the director of the adult dental clinic at Bellevue Hospital Center and an adjunct clinical faculty member at NYU College of Dentistry in the oral and maxillofacial pathology, radiology and medicine department. Welcome, Dr. Blanchard.

Dr. Ariel Blanc...: Thank you. Thank you for having me here tonight. I'm very happy to be here to present to all of you. Just a word on how I got here. One of my friends was diagnosed with breast cancer earlier this year, and I actually sent her a blanket with all the information so that she could get hooked into everything that Sharsheret has to offer. And actually, I don't remember who it was, but someone emailed me back and said, "Do you need support as a friend?"

And I was like, "This is kind of what I deal with all the time, so no, but I think I can offer something for you guys. If people are interested, I'm happy to talk about the oral effects of cancer therapy."

So let me just share my screen. And I hope that this brief presentation will kind of dive into your burning questions, and maybe we could do this again and have deeper dives into various issues. Okay. Okay.

Deborah Litwak: Looks good.

Dr. Ariel Blanc...: Perfect. All right. So I Have Cancer, Why Do My Teeth Matter? Okay. So why is dental health so important? I think in this country in particular, we have largely separated medicine and dentistry, but probably around during the past 20 or so years, we've come to realize that your oral health can be a contributing factor into systemic disease. Prime example would be periodontal disease and heart disease, but it can also complicate treatment in the case of cancer therapy, organ transplants, and cardiac surgery. So you've been diagnosed with cancer. What should you do with your mouth before and during treatment? First of all, tell your oncologist if you have outstanding dental work at the time of diagnosis or if you've had dental pain. And your oncologist can work with you and your dentist, and perhaps even with the dentist on staff at the hospital to understand whether the dental problems that you have could pose significant complications during your treatment.

So for example, you know you need a root canal. So a lot of people are walking around with teeth that need root canals. This is a chronic infection that is localized to your jawbone, that a healthy person's immune system can localize to the jawbone. But when you're immune compromised and undergoing chemotherapy, your body doesn't do such a good job at keeping that infection walled off. So that can become a systemic infection and complicate your treatment or put a pause on treatment. So it's important that those things are dealt with before you start or you and your dentist and your oncologist discuss other possibilities like putting you on antibiotics to get through the first cycle of chemotherapy. But it's important to have that conversation. It's also great to go for a dental cleaning and an exam before treatment starts. A clean mouth without calculus and plaque buildup reduces the severity of mucositis as Audrey talked about.

So it's very helpful. And it also makes you feel better to have a dental cleaning, most people. So you can go into your chemotherapy feeling like you have a really nice clean mouth. And then while you're going through treatment, you want to keep up with your home care as much as possible. Like I said, a clean mouth is less likely to develop as severe mucositis. And also oral hygiene is important for preventing cavities. So I always tell patients don't beat yourself up if you have a bad day or you have a couple bad days, but then when you're feeling good, make sure to focus on brushing and flossing, assuming that your counts allow for this to happen. The other thing is to be mindful about what you're snacking on and sipping on during the day. If you're feeling nauseous, if you don't have a big appetite, people are often just sipping on things. And very acidic drinks like sports drinks or even water with lemon in it, that acid can erode your enamel and cause trouble and results in cavities.

Again, on the days that you feel really bad, give yourself a pass, but on the days where you feel good, try and stick to water. Another thing that Audrey mentioned was toothpaste. One toothpaste that is really great, and I know we'll

talk about a lot of other toothpaste, but CloSYS is very gentle and really good for you if you are struggling. And I would say about the Arm & Hammer, just be careful. Do not get the version with peroxide in it. That causes a lot of problems for patients.

Okay. So let's talk about some of the side effects of cancer therapy. Dry mouth, oral mucositis and ulcers, osteonecrosis of the jaw, and taste changes. So dry mouth, why does it happen? So chemotherapy alters the function of your salivary glands and the makeup of your saliva. So this causes discomfort and also puts you at a higher risk for developing cavities. So how can we manage? There's tons of over-the-counter products. To name a few, we have XyliMelts, StellaLife products, Biotene, Salivea, Flintt mints. I always say this is a very personal choice. I can never find two patients that agree on the best dry mouth product. XyliMelts are definitely a fan favorite. They're just like a little wafer that you stick on your cheek. They dissolve, they taste good, and they also have anti-cavity properties, so they're helpful for that as well. During chemotherapy, the chemotherapy sort of changes your oral microbiome and can shift you towards a more cavity-prone microbiome.

So recently there's been some oral probiotics that have come on the market. StellaLife makes these products, and so does BioGaia. I've started to use it mostly with my head and neck radiation patients who are extremely dry and who are developing these chronic candida infections, and I've seen it to be helpful. So I've kind of started to recommend it to more patients and think that it can be something helpful to use if you find yourself in a position where you've started to become more cavity prone. There's also some extra fluoride toothpastes you can use and you can work with your dentist closely to try and mitigate this risk. Baking soda and saltwater rinses are really easy. They're really the best. I tell patients half a teaspoon of baking soda, half a teaspoon of salt, and eight ounces of water, but you can saturate it in whatever way feels best for you.

It's just about comfort and it really does work. Especially, well, I'll talk about a mucositis, but every two hours, if you have sores in your mouth, it really is very helpful. And then if your dry mouth persists, there are prescription medications. I personally haven't had to use them with patients undergoing treatment for breast cancer or ovarian cancer, but they're out there, pilocarpine and cevimeline. Mostly we're using this [inaudible 00:18:26] salivary gland dysfunction, but it can be helpful and it is there for you if you decide to try it.

Okay. Oral mucositis and ulcers. So what is mucositis? Mucositis is an inflammatory response to chemotherapy, radiation, immunotherapy, and other targeted therapies. Mucositis affects the epithelial mucosa, which is the top surface of your mucosa of your entire gastrointestinal tract. So it can happen through your mouth all the way through. It affects about 30 to 40% of patients undergoing chemotherapy. Patients can also develop ulcers related to their neutropenic status. And interestingly enough, sometimes if your counts are

rebounding, your mouth will start healing first even before your lab work shows that your counts are rebounding. And we also have now with the targeted therapies and immunotherapies, we're finding more and more, I wouldn't say mucositis, but a lot of ulcers and lichenoid mucositises and even some things that look like another oral disease, oral mucosal disease called lichen planus. So there's a lot that we can do for this.

Number one, good oral hygiene, cryotherapy or ice, either sucking on ice during treatment afterwards to manage pain. Then we have Magic Mouthwash, which is a compounded drug that has viscous lidocaine to numb your mouth, some Mylanta to help keep your mouth coated, and then Benadryl. That's the basic recipe. Different people make it differently, but that's basic recipe. Sometimes insurance doesn't cover that, so you can also just get plain viscous lidocaine. Again, we have salt water, baking soda rinses. They're easy, they're great, they're cheap. And then photobiomodulation or low-level laser therapy. We could talk for a really long time about that, but we're seeing that this really, really helps patients with mucositis. And it is a treatment that can be done in your dental oncologist's office three times a week and helps the mucosa heal and also prevents the formation of new ulcers.

The hard part about it is that you do have to go to the office. There are some intraoral at-home devices, but again, you're not guaranteed what the wavelength is, though there are a few that are FDA recommended devices. So sometimes if patients are coming from really far and we've done a bunch in office and it's working for them, then I'll recommend some of these. For patients that have ulcers or lichen planus-like lesions in their mouth, sometimes we end up giving them steroids or calcineurin inhibitors, which also is called tacrolimus. And that usually helps with these ulcerations and helps keep patients on whatever drug they need to be on for as long as they have to be on it. And sometimes we also end up having a persistent lesion that we're having trouble controlling, looks like it's getting worse, and you always want to rule out any kind of viral or bacterial origin like herpes simplex virus, et cetera. But there's a lot that we can offer.

Okay. So next we have osteonecrosis at the jaw. So what is that? That's a complication related to bone modifying agents. For example, Zometa, Denosumab, Fosamax, Boniva. These drugs are meant to help strengthen your skeletal bones, but they have an adverse effect in the jaw where your jawbone frankly dies. We don't really fully understand why this happens. This effect happens in the mouth, but we know that it can happen on its own, but more likely it happens when a patient has a surgical procedure to the jawbone like pulling a tooth or extraction, placing implants, or a periodontal surgery. So they're flapping back the gums. So if you do end up on one of these drugs, you want to inform your dentist. Breast cancer patients are on these drugs and there are pretty much three different categories. There's patients who are on it because they've developed osteoporosis, maybe from aromatase inhibitors.

There's patients who are on it because it's controlling their metastatic disease. And then there are patients who are on it because it's been recommended for breast cancer patients who are postmenopausal, and they all have different dosages and they have different risks. And so it's important to be working with the dentist who understands that or talking to a dentist in a hospital center who can then discuss with your dentist about how your teeth should be managed. But the main goal is prevention. So that's really, if there's one take-home message here, it's prevention, prevention, prevention, keeping up with your oral hygiene as much as you can during your treatment. But we've gotten a bit better at treating osteonecrosis. We used to think that surgical treatment could make it worse. We found that it doesn't. So now we will extract teeth if there's an area that's affected. We'll debride the bone.

We found that there's a drug called Pentoxifylline that can help. And again, there's lots that we can do, but the best thing you can really do is make sure to stay on top of your dental health during treatment and after treatment. Okay, so taste changes. So one thing sometimes it can be related to low zinc levels or anemia. Sometimes you could develop a candida infection in your mouth or thrush. Also, there's a disruption of nerve signals in the mouth, like a peripheral neuropathy of the taste buds. Dry mouth affects taste. Chemotherapeutics can end up in the saliva, giving you a gross metallic taste. And then the taste buds themselves. So the peripheral nerves and the taste buds themselves can be affected. So the thing about managing taste changes is we don't really have any great answers, but the good news is for most part, if your taste changes are related to chemotherapy, it does improve.

So there are some weak studies that support taking zinc. There's a study out of Japan and they used Polaprezinc. But if you can't get Polaprezinc, you could take zinc glycate. There was a small study with THC. It seemed a little bit helpful, but there's a lot of side effects. Alpha-lipoic acid is something that we actually use for neuropathic pain for patients with something called burning mouth and recommend taking 600 milligrams daily. The thing about it is you really have to take it for six months to see the effects or see if it's helping you. Nutritional guidance. If you're chewing slowly, that will help stimulate your saliva flow, which may improve the taste. Again, avoid foods that produce negative tastes. And then you can add aromatic flavors that will increase your salivation and stimulate your olfactory pathways. That will also stimulate your salivation.

I deal with a lot of head and neck radiation patients and I often tell them, "Look, things are going to change. And there's things that you may never like to eat again, which is unfortunate, but there's also definitely going to be foods that you didn't like before that you now like."

So it's not better, it's not worse, it's different. And I think that's a really good way to think about it. And I think if you think about it that way, you'll notice over time as you move farther from treatment, your taste will improve on its own. People are really bothered by it. There are medications that we use for

nerve pain that we can prescribe to our patients, particularly burning mouth patients, which I actually probably would think that there's probably some people sitting on this webinar now who have burning mouth. So you can try that as well.

So that's really it. This is my resources page. I just want to point out the first one. It's a link to ISOO, which is the International Society of Oral Oncology. They have a patient education page. It's really great, and it has some handouts. Kind of touching on some of the things I talk about, they're a great organization and they're under the umbrella of the Multinational Association of Supportive Cancer Care, and they do great work and have great resources for both patients and clinicians. And then always, if you're in the New York area, I'm happy to see anybody if you're struggling with any of this stuff. And there's also, I would say at many of the large hospital centers, there are dentists. So you should always ask wherever you're being treated. Ask your oncologist if there's anybody to talk to at your hospital center, or they may know one in the area. And that's it. Thank you so much.

Deborah Litwak: Wow. Thank you, Dr. Blanchard. I like your message of prevention, prevention, prevention, and keeping up with your oral hygiene, but you really provided so much information about why things are happening and how we can manage that moving forward. Onto our next speaker, Dr. Abida Taher, MD, PhD, founder of Uncancer, is a diplomate of the American Board of Nuclear Medicine. Abida has been in private practice since 2009. She earned her MD and PhD degrees from Tulane University in New Orleans. She completed her nuclear medicine residency at Baylor College of Medicine in Houston and her oncologic imaging fellowship at Dana-Farber Cancer Institute in Boston, along with a fellowship in dementia imaging from UCLA School of Medicine.

Uncancer is her deep dive into the common problems and issues cancer patients and their caregivers face as they normalize their life post-cancer. Being at the heart of the treatment for cancer patients, she has witnessed the many struggles they go through every day. With Uncancer, she has made it her mission to democratize cancer care for patients and their caregivers and to make their journey to recovery as comfortable as possible outside the clinic, outside the hospital, at home and at work. Welcome, Dr. Taher.

Dr. Abida Taher: Thank you so much. Thank you for that warm introduction and I'm so glad to be here and have this conversation. Dr. Blanchard, you did such an amazing job explaining the side effects that patients experience, and really it's so common. 60% of cancer patients have oral side effects. And if you're lucky enough to be in New York and you can go see Dr. Blanchard for your oral side effects, that would be awesome. But a majority of cancer care in this country happens within community-based oncology settings, so near to where you live, wherever that may be. And not everybody has access to the large cancer centers, whether it's in New York or MD Anderson or places like that. And so when you look at the most common cancers that are there in the US, what we call our bread and

butter cancers, which are breast, lung, colon, and prostate, and then of course other cancers that affect women, including ovarian cancer, despite not being in the head and space area, all of these cancers can affect the oral cavity.

And so as imaging and diagnostic mechanisms have improved tremendously over the past few decades, we're able to diagnose cancer much earlier. So previously we would think that cancer was a disease for old people in their 60s and 70s. But recently, because we're able to capture those changes that cause cancer or catch cancer much earlier, we're seeing cancers in younger populations as well. And on the other side, because treatment modalities have just skyrocketed and improved so much, patients can go through multiple cycles of recurrence and remission and still be able to live through all of those periods. And in many cases, that time is probably when they're managing a job, they have professional growth, they're getting married, they're having kids, they're having a social life. And through all of that, they still have to go through this cancer treatment and deal with side effects. And so it becomes really important then to have support, not just when you're sitting in the chemo chair and getting chemotherapy or you are at your doctor's office, but also when you're at home.

It's 2:00 AM in the morning and your mouth's really dry and you are drinking water and it's not helping you. And who are you going to call? Or you have these mouth sores or you've had radiation to your head and neck, and you're just not able to taste anything or eat enough and really impacts your quality of life. And so when Uncancer came to be, which is not that old, we're about four or five years old now, our goal was to support the patient and the caregiver outside of this chemotherapy setting or outside of the doctor's clinic or outside of the oncologist chair, when they're at home and when they're at work and when they're having their daily activities of living. So oral care, as Dr. Blanchard said, it gets impacted by a wide variety of cancers. And the most common side effects are mucositis or particularly when it's in the mouth, stomatitis, as we say, dry mouth, teeth sensitivity, dry lips, dry chap lips, or angular cheilitis, gum issues, and then taste changes.

Recently, and if you follow some of the cancer literature, you'll see that all of the newer medications that we would never think about within the oral space cause a ton of oral side effects, breast cancer drugs, multiple myeloma drugs, lung cancer drugs. Their mechanisms of action are so different than traditional chemotherapy that stomatitis or inflammation within your mouth mucosa has become a huge issue in about 60% of patients. Loss of taste with one of the multiple myeloma drugs, which is TALVEY is huge. More than 60% of patients have that side effect. And so you think it's confined to the mouth, but it has such a huge impact on your nutrition, your hydration. In so many cases, your ability to speak and communicate. When you have a dry mouth, it is so hard to talk. So all of these side effects need management. And one of the best ways to do that is to have this really good oral hygiene protocol. And Dr. Blanchard said that as well.

If you are unfortunate enough to have a cancer diagnosis, the last thing on your mind is, "How do I take care of my oral cavity?" But if you go through treatment and when you go through treatment and these problems come to fore, it is always great to have something with you that can help you manage those side effects. And so for example, the salt and soda mouth rinses that Dr. Blanchard was talking about, instead of having to make it yourself, if the salt and soda mouth rinse comes as a single serve packet through Uncancer and you can just buy it, open it, put it in 32 ounces of water, swish and spit throughout the day, it makes your life easier. A dry mouth candy. We have a sugar-free candy, which has very simple ingredients, but does a great job in stimulating your saliva, which is what you want.

And also to realize that it's not just cancer treatment or the cancer itself that's causing dry mouth, but you could be on a variety of medications. And dry mouth is a very common side effect, whether it's antihypertensive medications, whether you are on medications for depression, whether you're on medications for anything that you can think of. It causes dry mouth. Dry mouth is so common. And so it just compounds the dry mouth that you're experiencing from your disease process or from treatment. So again, something that you can carry with you everywhere you go that does not impact your sugar levels, that you're able to stimulate saliva is huge. Taking care of your lips, your lips, the skin on your lips is probably the thinnest skin that you have on your body. And again, as it is impacted and it gets dried and chapped and sometimes it can bleed, really, really is painful.

It also impacts how you eat. So there's that issue. And then taste that Dr. Blanchard talked about. Again, if you're not able to taste anything or you have this metallic taste in your mouth because of the treatment that you're getting, it's really hard to eat. The other thing to realize is that any of these side effects, there's not one thing that can solve it completely. I always go by something that I had learned, which is called the 10% rule. Anything that improves your side effect by 10% and you add another thing that improves it by another 10%. And if you have five of those things, soon it's going to be 50%. And a 50% improvement in your side effect can make the difference from you lying in bed unable to go anywhere or do anything to actually having a life, having an improved quality of life.

So synergistic action of products makes a huge difference within the oral cavity. So if you have something for dry mouth and you're consistent and compliant with your mouth rinses, and you have a toothpaste that helps rebuild your tooth enamel and improves teeth sensitivity and gum irritation, you have a great lip balm that doesn't have petroleum or petrolatum, but actually has ceramides or other ingredients that help rebuild and protect that thin skin. All of those things can work together to improve your mouth feel, to help you get through treatment and through survivorship because so many side effects just don't go away after treatment. They may linger on, especially if you have a head and neck treatment or even other cancers. So really being consistent, making sure

that you use your products the way you're supposed to use, and then slowly but surely get through treatment and to survivorship and then have a better quality of life. And that's sort of the goal for Uncancer as well.

The other thing I wanted to just mention is that when, like Dr. Blanchard said, that when you go to your treatment and talk to your oncologist or your oncology care team, be an advocate for yourself. Tell them that you would like to see a dentist. Ask them what you should be asking the dentist. Ask them for that support. They're there for you. They may not have the time always to talk to you. My husband's an oncologist and I keep harping on all of this stuff with him and he's like, "Do you know how busy I am?"

And I'm like, "Yes, you're busy, but this is something that really impacts the life of a cancer patient." So be the best advocate that you can be for yourself. Or if you have a caregiver who can do that, talk to them, ask questions, be informed. Find out who are the great dentists in your area who deal with oncology patients, establish a relationship. And hopefully over time, as you finish treatment and into survivorship, these side effects will get better and you'll be able to go back to your life. Thank you.

Deborah Litwak: Thank you, Dr. Taher. How encouraging to keep in mind the 10% rule. I like that. Looking for those things that improve our side effects by 10% and maybe we can find another 10%. I like that. And of course, for the reminder to advocate for yourself. That is a message that at Sharsheret we provide often. Look out for yourself. You're the one who knows you the best. We're going to move on to our Q&A. We want to welcome Dr. Blanchard and Dr. Taher back to the screen. Please know that we cannot address all of the personal issues, but we're trying our best to summarize the questions. So listen for the nature of your question, maybe not so much the specifics of your question, and we'll try and get through as many as possible. First off, maybe Dr. Blanchard, can you comment on the frequency of dental checkups during treatment and whether fluoride every three months is a good option? How often should one be going to the dentist while they're in treatment?

Dr. Ariel Blanc...: So I think it depends on who you are as a dental patient. Look, we go to the dentist every six months. That was something that was created by the insurance companies. Some people really don't need to have a professional cleaning twice a year. They can go once a year. Other people need to go four times a year. So if you are someone who needs to go four times a year, then you should try and adhere to that schedule. Again, you always have to know that missing one cleaning is not going to make or break you. Like most things in life, missing one thing is not going to make or break you. But if that's what your oral health really needs, then you should try to find times to go within the treatment that's reasonable at the same frequency that you went when you were not undergoing treatment.

Deborah Litwak: Thank you.

Dr. Ariel Blanc...: Well, there was a second part to that question, wasn't there?

Deborah Litwak: Oh, if fluoride is good, bad, indifferent.

Dr. Ariel Blanc...: I'm pro-fluoride. I mean, fluoride can be an irritant for some people, but it's not something that typically my cancer patients have trouble with. You could also use nano-hydroxyapatite. That's also very good for cavity prevention. It's been used here now for a while, and it's been used in Asia for a really long time. But I don't think you need to have topical fluoride applied at the dentist. You should be fine.

Deborah Litwak: Good. How fast might one feel the effects of chemo or radiation on their oral health? And you talked about how to reduce those risks already, but how fast might that come on or is that just a personal individual thing?

Dr. Ariel Blanc...: You want to take it?

Dr. Abida Taher: Yeah, sure, sure. So the oral mucosa, between 21, so three to four weeks, your oral mucosa gets replaced just as a matter of routine. So once you start chemotherapy, about at three weeks, most head and neck cancer patients or even AML, which is leukemia, at three weeks they really find a peak where their symptoms really start to bother them. And so if you go through multiple cycles of chemotherapy or biologics or any of the newer medications, that's about the timeline that you see, between about three weeks, I would say 21 days.

Dr. Ariel Blanc...: Yeah. And I would also add it really also now depends on what kind of treatment you're getting. So the more newer novel therapies, like I said, a lot of them can just present as ulcerations, not a true full mouth mucositis. And the other thing about radiation, the radiation for breast cancer doesn't typically affect your oral cavity. It's head and neck radiation.

Dr. Abida Taher: That's correct.

Deborah Litwak: And when in that, whether you're deciding between mucositis or just an ulcer, at what point do you contact the doctor or your dentist?

Dr. Ariel Blanc...: As soon as your mouth hurts.

Deborah Litwak: All right, good. And be an advocate for yourself. How do AI, aromatase inhibitors, impact teeth?

Dr. Ariel Blanc...: Well, I think again, so mostly their impact is that lots of times patients have to go on bisphosphonates or bone strengthening medications. They don't typically directly impact teeth.

Deborah Litwak: Okay. And there were a lot of questions around Zometa, which is a medication I looked up designed to slow down bone breakdown. Can you comment on the

risks versus the benefit of a drug like that on what it's doing for the whole body versus what it's doing to the mouth?

Dr. Ariel Blanc...: You should 100% take the drug.

Dr. Abida Taher: Yes.

Dr. Ariel Blanc...: We'll manage the other side effects. It is a lifesaving, a life-extending drug.

Dr. Abida Taher: And it's standard of care as well. So what your oncologist recommends, do it. And then you have Dr. Blanchard for everything else. Yeah.

Deborah Litwak: Right. Excellent. While on Zometa infusions, what dental procedures do you need to avoid?

Dr. Ariel Blanc...: Surgical, so bony, things that affect the bone. The major problem is, and this is that we don't really know how. We have some ideas of how long it stays in your body for, but we know that it can stay in your body for a very long time. So it's something that you always need to think about, but we're getting better at treating it. We're also getting better at stratifying risk based on cumulative dose and the actual dose. For example, if you are on bisphosphonates for osteoporosis, you really don't have to worry about this side effect. It definitely can happen, but the numbers are so small. So we are now more comfortable taking out teeth in those patients and even placing implants.

Deborah Litwak: Nice. Any long-term side effects on prednisone and immunosuppressants on oral health?

Dr. Ariel Blanc...: Do you want to?

Dr. Abida Taher: Yeah, so steroids can have multiple effects throughout your body, and also within the mouth, you can definitely have dry mouth associated with steroid medications as well. And people who are on long-term prednisone, which they probably absolutely need, depending on which stage of disease they are or what kind of treatment they're getting, can impact the mouth. So dry mouth is something that they complain about a lot and definitely should be managed because of course it has a lot of downstream effects.

Dr. Ariel Blanc...: And they also are very prone to developing yeast infections.

Dr. Abida Taher: Yeah.

Deborah Litwak: What are some of the resources that we can share with our own dentist after we finish chemo, once we start Zometa or a similar medication? What are the resources that we can bring to our dentist to say, "This is what I'm going through, this is what I might be expecting when I'm going through chemotherapy?"

Dr. Abida Taher: I think definitely knowing what treatment you are on. Being an advocate, you should have that information of what treatment you're getting. You should know what stage disease you are. The basic information about your cancer, you must know. And then when you talk to the dentist, it really helps to know what medications you are on as well, not just for your cancer treatment, but other medications because all of them can have a cumulative effect on your oral cavity. So I always tell patients that know your medication list really well, know what treatment you are on for cancer, and how often you're getting it. Because there might be ways for you to have preventative visits as well with your dentist so that they can monitor you before symptoms get so bad that it really impacts your quality of life.

Dr. Ariel Blanc...: Yeah, for sure.

Deborah Litwak: Aside from baking soda and salt water, are there recommendations for treating any of these symptoms naturally?

Dr. Abida Taher: So one thing that for the salt and soda mouthwash, and that's definitely an MASCC recommendation. And totally I go by it as I tell patients to make it and stick it in the fridge. Keep it cold. Cryotherapy, especially for some of the newer medications where the mechanism of stomatitis or mucositis is not the same as traditional chemotherapy. The cold cryotherapy helps a lot. So I definitely say keep it cold, rinse often. But other than that, I am not a big recommender of other natural products. Maybe Dr. Blanchard.

Dr. Ariel Blanc...: Yes. So manuka honey, I think that in their MASCC/ISOOs Mucositis Guidelines gave it, it wasn't a full recommendation, but that it has some hope. The one thing about manuka honey, and I have had patients who use it, you do have to be really careful because you're literally putting sugar on your teeth. So that is a consideration, but it is quite soothing, especially if there's some throat pain involved.

Dr. Abida Taher: It's also anti-inflammatory, manuka. If you get the really good quality manuka honey, it's anti-inflammatory. So that component also helps.

Dr. Ariel Blanc...: And sometimes I also recommend coconut oil for dry mouth, especially if it's waking you up at night. So I just tell patients to take a clean finger and just massage your oral tissues with some coconut oil, which has anti-inflammatory properties. It's pretty soothing and can help keep your mouth moist throughout the night.

Deborah Litwak: Wow. Sorry, which oral probiotics do you recommend for fungal and thrush presentation?

Dr. Ariel Blanc...: So first I would say if you actually have thrush, you need antifungals. So you need either nystatin or clotrimazole troches. But if you're getting recurrent thrush and you're having trouble controlling it, I don't think it can harm you to

try some of these oral probiotics. The two brands are StellaLife and BioGaia. I kind of like StellaLife a little bit better, but that's just because I like their other products. But I think the jury's still out on these things. I don't think they're harmful. I see them to be a little bit helpful. I'm just not sure how helpful.

Dr. Abida Taher: And if you're having oral thrush, you should definitely tell your doctor and get the right treatment for it. And then this can be an adjunct or an additive, but definitely get your antifungal medication.

Deborah Litwak: Does oral chemotherapy affect your oral health the same way that infusion chemotherapy does?

Dr. Abida Taher: Yeah, I mean either way, whether it's infusion or it's oral, the side effect profile of a treatment is not really determinant by the route of administration. So it can be a medication other than radiation, which has direct impact because in the head and neck space, if you're getting radiation there, everything else, regardless of the route of administration, can have oral side effects. So that really, I don't think makes a difference.

Dr. Ariel Blanc...: Yeah, no, I agree.

Deborah Litwak: Nice. And I did notice that one person said they found coconut oil very helpful, but not to spit it down the drain because it can clog your sink!

Dr. Ariel Blanc...: Yeah.

Deborah Litwak: So another practical tip for this evening. Any suggestions on a fluoride toothpaste?

Dr. Abida Taher: The Uncancer one is a nano-hydroxyapatite. It's a 10% nano-hydroxyapatite, which is where all the tests have been done. So it's at the right percentage. It has the right shape of the nano-hydroxy crystal to rebuild your enamel. And fluoride's great as well, but if you're having gingival irritation, sometimes a nano-hydroxyapatite toothpaste can really help with that as well. And it's been tested extensively, like Dr. Blanchard said, especially in Japan where it was first introduced, and it has a very good safety profile as well. Really seems to help a lot of patients. Yeah.

Deborah Litwak: Nice. Oh, someone's asking if you can spell that toothpaste.

Dr. Abida Taher: Sure. If you go to the uncancer.com website, you can buy it directly there. It's nano-hydroxyapatite. There are other brands that make it as well. N-A-N-O, nano. Hydroxy, H-Y-D-R-O-X-Y. Apatite, A-P-A-T-I-T-E.

Deborah Litwak: Nice. And the link to Uncancer is in the chat box. Maybe one of our final questions this evening is, do you know of any financial resources to help with dental coverage for low-income patients?

Dr. Ariel Blanc...: Yeah. For example, at least at my hospital center, there is a financial aid program for patients. There's lots of dental schools throughout the country. Sometimes they offer discounted treatment. And yeah, there are some foundations, I don't know any particulars, but there are some out there that will help you with your treatment costs.

Dr. Abida Taher: I think some of your state or county medical departments will also help with very low cost dental work, but that's a space that you can try getting foundation money for sure. But yeah, for products, just drop us an email. We'll be happy to send you some.

Deborah Litwak: Thank you. Thank you both really for your expertise this evening. It's eye-opening and quite comforting to know that the messages tonight of listen to your oncologist and we'll deal with the side effects separately and that we can deal with the side effects. And you really provided hope and guidance for people on the call tonight. So thank you. We really are grateful to Audrey who shared her story, both Dr. Blanchard and Dr. Taher. Thank you for sharing and helping us understand the impact of cancer treatment and steps we can take to protect our oral health. And thank you all for being on the call this evening. Please take a moment to fill out our brief evaluation survey that's in the chat box. It really does inform our future programming. We want to know what you're interested in, and that's how this program came about tonight because people have really expressed this concern to our clinical team.

Sharsheret's contact information is in the chat box. Please remember that Sharsheret is here for you and your loved ones, and all our programs are free and confidential. Also note that Uncancer's mouthwash is included in our treatment care kits. If you would like a treatment care kit and you are already connected with Sharsheret, please reach out to your clinical social worker. If you're new to Sharsheret, simply complete the form below and we'll be in touch. And let's add that to the chat. Yes. Did we get that in there? Thank you. As we come to a close, I really want to thank you all for participating tonight. Let's see. I just want to make sure we can put this in there. All right. There's the form so you can complete that for a treatment care kit. But really, thank you. Thank you, Dr. Blanchard. Thank you, Dr. Taher. Thank you, Audrey, and thank you all for being here tonight. Have a really good evening.