00;00;00;02 - 00;00;33;01 WNPR Funding for Yale Cancer Answers is provided by Smilow Cancer Hospital. Welcome to Yale Cancer Answers with the director of the Yale Cancer Center, Dr. Eric Winer. Yale Cancer Answers features conversations with oncologists and specialists who are on the forefront of the battle to fight cancer. Here's Dr. Winer.

Dr. Winer Protecting our skin is always more top of mind in the summer as people are getting increased sun exposure and applying sunblock to prevent burns and skin cancer.

00;00;33;12 - 00;00;58;12 Dr. Winer And I will say just last night I was in a restaurant and I saw the reddest man I've ever seen in my life. And I thought, Oh, that poor man. Our skin is the largest organ in our body, and skin cancer is also the most common cancer, with more diagnosis per year than any other cancer, in fact, more than all cancers combined.

00;00;59;08 - 00;01;25;24 Dr. Winer Statistics show that one in five Americans will develop skin cancer by the time they're 70 and many more after the age of 70. To help us better understand the field of skin cancer and what we now call anchored dermatology and skin conditions that can result from cancer treatment. I want to welcome Dr. Jonathan Leventhal, who's the director of the Anchored Dermatology program at Smilow Cancer Hospital.

00;01;26;15 - 00;01;58;24 Dr. Winer Jonathan, thanks for speaking with us today and look forward to talking about both skin cancer and protecting yourself from skin cancer, but also, as importantly, all the complications that arise from cancer treatments in terms of the skin. So again, welcome. Thanks for having me. It's great to be here again. So first, maybe you could just start by explaining anything what it is that you do as an onco- dermatologist.

00;01;58;24 - 00;02;39;18 Dr. Winer To our listeners, what is this field? How long has it been around and how is it that you interact with cancer doctors and patients, for that matter?

Dr. Leventhal That's a great question. So the field of dermatology and it's relatively new is one that's dedicated to providing dermatologic care to patients with cancer. And patients with cancer can experience so many complications from their treatment, including chemotherapy and new targeted and immune therapy, radiation stem cell transplantation.

00;02;40;03 - 00;03;18;05 Dr. Leventhal And what oncologists have seen for years is that these toxicities and complications really have a profound impact on their quality of life and in severe cases can disrupt their ability to stay on their treatment. So having dermatologists integrated into the cancer team, you know, the oncology team has shown to improve outcomes. So that's what I do. My clinic is at the Yellow Smilow Cancer Center, and it's full of patients who are undergoing cancer treatment with a variety of cancers and they present with many, many complications.

00;03;18;05 - 00;03;42;02 Dr. Leventhal They can impact their skin, their hair,

their nails, their mucosal surfaces. So it's really been a pleasure and an honor to be part of that, that cancer team. Sure. Well, you know, it's it's sort of remarkable when you talk about challenges that people can have with treatment in terms of their skin. Oftentimes they say, oh, you know, a rash, it's no big problem.

00;03;42;18 - 00;04;17;02 Dr. Leventhal But I think patients often don't realize in advance how just uncomfortable some things can be. And it's it's really a big deal with a lot of our newer treatments. So you had mentioned targeted therapies and, you know, targeted therapies are this whole new generation of therapies that are directed against a specific target. So a gene mutation and or too many copies of a gene.

00;04;17;20 - 00;04;54;20 Dr. Leventhal But oftentimes their effects in normal tissues to and, you know, for example, the kinds of rashes you see with some of the EGFR inhibitors where people look like they're 15 again and, you know, have these acne like rashes on their face and over their body. This can be really distressing. Oh, absolutely. And I think you hit the nail on the head that targeted class, the EGFR or the epidermal growth factor receptor inhibitors and the E epidermal, you know, the epidermis of the skin.

00;04;54;29 - 00;05;20;21 Dr. Leventhal So it targets these pathways in the cancer cells, but also results in a lot of problems on the skin. And so patients can have acne again, so they have painful acne pustules on their face. They're scalped or chest in their back. It can be itchy and stinky. Their nails can have horrible infections where the nail lifts up and they get nail infections.

00;05;20;21 - 00;05;46;20 Dr. Leventhal Called parenchyma is a technical term we used, and just being able to alleviate those symptoms gives patients such quality of life back that they're able to stay on their cancer treatment, go about their day to day life. And it's one of the highlights of what we do.

Dr. Winer Yeah, and there's, you know, nothing worse than somebody who's just feeling like they need to itch all night. 00;05;47;25 - 00;06;22;13 And, you know, these symptoms sometimes just really interfere with people's ability to live a normal life. It's also remarkable that I think, as a general rule, cancer doctors and you probably have a very good perspective on this aren't the best dermatologists.

Dr. Leventhal You know, So you're really raising a good point in that cancer doctors are great at, you know, treating cancer. 00;06;22;13 - 00;06;51;19 And they know a lot about the skin, the hair, the nail problems that that that occur. But having a dermatologist weigh in just to reassure the oncologist that this rash is okay, we can treat it. It's not life threatening. We can get them back on their treatment. Using specific dermatologic therapy, I think really helps out. You know, I find myself on the speed dial of a lot of our oncology colleagues at Smilow, which is great.

00;06;51;28 - 00;07;20;16 DR. Winer And I think that there's a profound ap-

preciation, I would say, for the dermatologic care. Well, look, we know how to recognize a rash. We know how to recognize when someone has a symptom. We just don't know what to do about it, which is why we need you. And, you know, it speaks to the fact that it takes a team of people to care for patients and, you know, having you is, you know, just fantastic.

00;07;22;10 - 00;07;47;04 Dr. Winer Although the field is new, of course, there have been skin problems related to cancer therapy for years and years. And, you know, of course, the therapy that also comes to mind is radiation. And, you know, there's much of the kind of problems people have with radiation that reminds one of a sunburn. But it sometimes goes beyond that.

00;07;47;04 - 00;08;15;21 Dr. Winer Maybe you can talk a little bit about the effects of radiation on the skin

Dr. Leventhal I mean, radiation therapy is used in, you know, 50% of cancer patients. And so, as you mentioned, almost everybody who undergoes radiation develops what's called acute radiation dermatitis. And it is like a burn at the area of radiation. And most of the time just using moisturizers and occasionally some prescription topical steroid creams takes care of it.

00;08;16;02 - 00;08;49;01 Dr. Leventhal It's very rare that it becomes quite severe where the skin breaks down with blisters. And then we really have to help our radiation oncology colleagues with wound care. But what's fascinating is that even after radiation months, two years later, we see a variety of skin changes and we actually call it chronic radiation changes to the skin. And we see this a lot in patients with breast cancer like your area where the breast skin can become thickened or fibrotic, we call it.

00;08;49;12 - 00;09;12;09 Dr. Leventhal There can be change in the color of the skin, pigment changes and even the development of a lot of broken blood vessels in the skin to link Taser's. And we can help patients who have these chronic radiation changes with a variety of means, whether it's prescription medications that are in the form of creams or even some pills that can help soften the thickened skin.

00;09;12;22 - 00;09;37;18 Dr. Leventhal And we even have available esthetic treatments in the form of lasers and others to help with the pigments and the blood vessel proliferation. So for sure, there can be a variety of chronic radiation changes that can occur years later. And, you know, to some extent, the radiation oncologist can and have adjusted the way they give radiation to try to decrease some of these complications.

00;09;37;18 - 00;10;09;25 Dr. Leventhal But sometimes they happen, no matter what you try to do.

Dr. Winer So what about standard chemotherapy?

You know, standard chemotherapy may have, on average, fewer problems associated with it in terms of the skin than targeted therapy. But there's still

problems with drugs like five. If you and Adrian mice and other just very standard chemotherapy drugs that are still, for better or worse, part of oncologic care for sure.

00;10;09;25 - 00;10;33;09 Dr. Leventhal And we see a lot of this, especially in patients with breast gynecologic colorectal, another GI cancers who use classic chemo such as taxane as you mentioned Anthracyclines five for you. And so hair loss is a big one. The loss of hair, which really impacts all patients, especially young women, middle-aged women who are undergoing treatment for breast and gynecologic cancers.

00;10;33;11 - 00;10;58;21 Dr. Leventhal We studied this. We know it impacts quality of life. Patients can also have a variety of rashes, many of which impact the hands and feet, which are areas that we don't think about too often on a day to day we rely on it's so heavily and so when patients develop chemotherapy, rashes, one is known as hand foot syndrome, the technical term for it, and they develop painful rash and blisters on the palms and the soles.

00;10;58;29 - 00;11;24;04 And it can affect the nails as well, and it impacts the ability to go about day to day life. And, you know, those are those are the two big ones. The third one we see, as I alluded to a little bit, are the nail changes. Our nails are really important, right? We use them in day to day things and when the nails lift off and when they have underlying bleeding or infections, it can really impact quality of life.

00;11;24;09 - 00;11;49;13 So fortunately, there's things we can do to help regards to prevention, you know, cold, cold therapy, whether it's the cold cap or a patient will wear like a frozen cap on their scalp during treatment, can help reduce the chemo going to the scalp and can help preserve hair. Studies have shown it works in a lot of our patients do that depending on the chemo regimen they're undergoing, especially breast cancer patients.

00;11;49;13 - 00;12;13;10 We can also try to cool down your hands and your feet, and that can reduce the rashes that go there as well. So we have preventive treatments and we also have therapeutic treatments as well. Yeah, Well, you know, the cold cap actually has been a real advance for a lot of people. It can be a little uncomfortable. And there are some patients who just don't tolerate it terribly well.

00;12;13;29 - 00;12;43;06 But for some kinds of chemotherapy that are associated with hair loss, it can really prevent it almost entirely. There are some other treatments that even with the cold cap, people still lose their hair almost all the time. I always remind people that it grows back and, you know, it's just a short period of time. But it's for I think for a lot of women in particular, it's a pretty devastating problem.

00;12;43;14 - 00;13;08;28 Unknown Not to say that there aren't men who care about it as well. And the nail changes you talk about are really uncomfortable at times, too. It's it's something that can be just very, very painful for sure.

So it's great that we are able to offer patients, you know, remedies to at least alleviate the symptoms to allow them to have improved quality of life, stay on the treatments.

00;13;10;06 - 00;13;31;04 DR. Winer So we're going to take just a brief break. When we come back, we're going to talk about some of the skin problems that arise with immunotherapy, which is, of course, the new big therapy over the last 5 to 10 years and one that is increasing in use. And then we're going to talk about how people can protect themselves from the sun.

00;13;31;11 - 00;13;58;07 Dr. Winer It's the summer months. And we've talked a little bit about this on the show before, but you can't say it often enough. So we'll be right back.

WNPR Funding for Yale Cancer Answers comes from Smilow Cancer Hospital, where a multidisciplinary team of physicians employs state of the art diagnosis methods for patients with sarcoma and other bone cancers. Smilow Cancer Hospital dot org.

00;13;58;07 - 00;14;21;05 It's estimated that over 240,000 men in the U.S. will be diagnosed with prostate cancer this year, with over 3000 new cases being identified here in Connecticut. One in eight American men will develop prostate cancer in the course of his lifetime. Major advances in the detection and treatment of prostate cancer have dramatically decreased. The number of men who die from the disease.

00;14;21;17 - 00;14;47;26 WNPR Screening can be performed quickly and easily in a physician's office using two simple tests, a physical exam and a blood test. Clinical trials are currently underway at federally designated comprehensive cancer centers such as Yale Cancer Center and its Smilow Cancer Hospital, where doctors are also using the Artem as machine, which enables targeted biopsies to be performed. More information is available at Yale Cancer Center dot org.

00;14;48;08 - 00;15;31;19 You're listening to Connecticut Public Radio.

Dr. Winer This is Eric Winer back with your cancer answers. And my guest, Dr. Jonathan Leventhal, who is the director of the Onco-Dermatology program at Smilow Cancer Hospital and Yale Cancer Center. Jonathan, let's talk a little bit about immunotherapy and just to give our listeners a little bit of background. Immunotherapy, of course, is the treatment that has become the latest and greatest in cancer treatment over the past decade.

00;15;32;08 - 00;16;00;21 Dr. Winer It doesn't work in all cancers, but it works in many cancers. And the interesting thing about immunotherapy is that it essentially frees up your immune system to attack the cancer. But sometimes that allows your immune system to start going crazy and attacking the patient themselves. And let's talk a little bit about some of the skin problems that arise there.

00;16;01;10 - 00;16;27;12 Dr. Leventhal Yeah, absolutely. As you just said it, once the immune system is activated, we see a lot of immune related skin problems that develop and they probably occur between itching, which can be really intense and a variety of rashes which I can discuss probably affects maybe over a third of patients. So that's a large percentage of patients that will experience itching or a rash.

00;16;28;03 - 00;16;55;28 Dr. Leventhal And what's really fascinating about the rashes that we see in patients on immune therapy is that they're often an autoimmune or or inflammatory skin rashes. So rashes that that we see that are autoimmune. So examples are psoriasis, bullies, pamper go is one in which patients can develop itching and blisters on their skin and that can really impact quality of life.

00;16;55;28 - 00;17;36;18 Dr. Leventhal As you can imagine, having walking around with itchy blisters all over. Vitiligo is something we see that happens, especially in patients who are have melanoma and are undergoing immunotherapy treatment. And that's where they lose their skin pigment. And and these autoimmune rashes require treatment because it really impacts patient's quality of life as well as itching does. And fortunately, in the vast majority of the time we studied this at Smilow, we're able to keep patients with cancer on their immune therapies by managing their dermatologic side effects, which is really great.

00;17;37;18 - 00;18;08;07 Dr. Leventhal And, you know, I don't want people to think that immunotherapy is something that is intolerable for most patients. It's pretty tolerable with some intervention. There are a few people who really can't tolerated and have to come off because of side effects. And it is interesting that the kinds of problems we see with immunotherapy very similar to the problems that that we've seen for years with different kinds of autoimmune diseases.

00;18;08;24 - 00;18;35;26 Dr. Leventhal Just as you pointed out, psoriasis is one that I'm not used to thinking about with immunotherapy, but I guess it's pretty common. Yeah, it can happen for sure. And patients that have underlying right. So they have existing, I should say, autoimmune skin conditions. We've also seen them flare. But I think a key takeaway is we can manage these rashes when they happen.

00;18;35;29 - 00;18;59;02 Dr. Leventhal Most of the time they're mild. Occasionally they're more moderate or severe in their intensity. And we can treat the rashes and patients can go back on their treatment. It's extremely rare. It's very uncommon for a rash to be so severe that the patient has to end up in the hospital and has to hold their treatment.

00;18;59;10 - 00;19;24;05 Dr. Leventhal That is very uncommon. And so, yeah, we see these patients very often. They probably are a high percent of my practice now, the new immune therapy rashes.

Dr Winer And are there any patients you think you should see before they start

therapy? You know, for example, somebody who has a preexisting skin problem like psoriasis?

Dr. Leventhal Absolutely. That is a great point.

00;19;24;11 - 00;19;47;05 Dr. Leventhal And a lot of the oncologists do. So they still send patients to me who have existing psoriasis or eczema or an autoimmune condition where they have those blisters on their skin and I'll see them and what really optimize their care so that when they go on immunotherapy, the hope is that they don't flare up as much.

00;19;47;05 - 00;20;22;09 And if they do, at least we know them, they're plugged in with our practice. We can get them in and, you know, manage their symptoms right away.

Dr. WinerSo now maybe we can shift gears and talk a little bit about both protecting yourself from the sun, the sun, and also maybe we can touch on what people should look for on their own skin, because obviously none of us can be running to the dermatologist on a weekly basis asking them to check every little thing that comes up.

00;20;23;15 - 00;20;52;06 But first, let's start with the sun. How much is too much?

Dr. Leventhal So that's a good question. So we're shifting gears to skin cancer now, Right? And so that's what we're talking about now, is that with regards to skin cancer, which is, as you mentioned in the introduction, it is the most common cancer worldwide, the the predominant environmental risk factor for developing skin cancer is ultraviolet exposure from the sun.

00;20;52;20 - 00;21;23;12 Dr. Leventhal And we know that any ultraviolet exposure isn't good. But in particular, sunburns have been really linked to the development of skin cancer, including melanoma, which is the one that everybody talks about as being the potentially most dangerous one. Right. And it's true, melanoma is the least common of the big three basal cell being the most common, followed by squamous cell followed by melanoma.

But melanoma can, when it is more advanced, spread and can cause, unfortunately, mortality and deaths. So protecting yourself from the sun is the one thing we can do to reduce the chance of getting skin cancer. A lot of us love the sun, myself included. So what does that look like? It looks like wearing a hat and protective clothes when you're going to be out there, especially in the summer, it means applying sunscreen before you go out to all exposed areas and and I get this question all the time, Eric, what sunscreen should I use?

00;22;02;11 - 00;22;26;15 Which one's the right one? What's the wrong one? My answer is always the same. Whichever sunscreen you'll use is the best one for you.

Dr. Winer What's the minimum SPF?

Dr. Leventhal Yeah, good question. So SPF, which is the sun protection factor, it basically is for those listening, it's a factor that shows how protective is this sunscreen? So how much more sunblock would you need? Studies have shown SPF 30 or above is all that you need. SPF 50, 75, 100. Sure, it's great. There's some more benefit, but really not that much more compared to SPF 30. So I tell patients, SPF 30, you want to make sure that it's broad spectrum, which most sunscreens are now.

00;22;52;04 - 00;23;22;18 Dr. Leventhal It blocks the two types of ultraviolet rays, A and B, and the key is to apply it and reapply it. A lot of patients come in after a sunny trip and they are you know, they have peeling sunburn and they say, but Doc, I applied sunscreen in the morning. I said, I believe you went swimming. Yeah, exactly. So you have to reapply it, especially after sweating, you know, after swimming, after a few hours, you have to reapply it.

Dr. Winer So is there anyone who's protected based on different aspects of their skin? You know, people always talk about individuals who are fair and red headed. You know, as being particularly sensitive. Conversely, are there people who are darker, who don't have to worry?

00;23;53;22 - 00;24;17;24 Dr. Leventhal So that is a great question. So now we're now we're touching upon the other risk factors which are which is genetics, right? The ones that the risk factors that we can control. So we know that patients who have lighter skin, freckles, blue eyes, red hair, lighter hair, they're at increased risk of sunburns and dramatically increased risk of developing skin cancer.

00;24;18;08 - 00;24;50;10 Dr. Leventhal We also know that patients get all skin cancers. Yes. Doing melanoma, correct. We also know that patients who have darker skin tones are less likely to burn. However, this is a really important point. Anybody can develop skin cancer, any skin tone, anybody. I have many patients that I see at Smilow Cancer Hospital who have darker skin, including patients who are Hispanic or African-American, and they can develop skin cancer.

00;24;50;15 - 00;25;19;28 Dr. Winer So nobody is is safe from, you know, avoiding sun protection. Everybody should protect themselves. But it is true, the lighter skin you have, the more likely you are to have sunburns and the more likely you are to develop skin cancer. So how should people check themselves? I'm particularly sensitive to this at the moment because a close family member recently was diagnosed with melanoma.

00;25;20;06 - 00;25;44;13 Dr. Winer And the reason that she was diagnosed at a very early stage is because when she saw a mole change, she went to her dermatologist right away. But what should people be looking for and how often and at what age should they start seeing a dermatologist? Yeah. So you mentioned this earlier. Not everybody can just run to the dermatologist.

00;25;44;25 - 00;26;07;23 Dr. Leventhal Yes, exactly. Studies have shown that really we have to focus on those who are at risk. So I would say the following. If somebody has something on their skin and maybe once a month, they can

look in the mirror, they can look at their moles and their freckles and their and their spots on their skin if they notice something changing.

00;26;08;01 - 00;26;30;03 Dr. Leventhal Right? So maybe a light brown mole that now is is turning dark brown or blackish or or it's bleeding or turning red, that is something that should be checked out right away. So if there's a spot that's concerning or changing, if somebody has a history of skin cancer, they should see the dermatologist for sure for routine skin checks.

00;26;30;13 - 00;26;49;17 Dr. Leventhal If someone has a very strong family history of skin cancer, they should see the dermatologist for checks. And that's really what it's about. Just checking yourself periodically, having a partner, look at your back maybe once a month, because if you do it too often, you're not going to notice a change. Right. So about once a month is the general recommendation.

00;26;50;14 - 00;27;14;12 Dr. Leventhal Check your skin. Look for something that's changing. If you see something that's changing and bothersome, go to the dermatologist. You know, everyone talks about the ABCs of melanoma. So a means it's something's asymmetrical. B is the border irregular, C is the color kind of changing or varied? D used to be diameter or meaning Is is it growing larger?

00;27;14;12 - 00;28;02;08 Dr. Leventhal I like D for dark because most of the melanomas, the vast majority are dark. There are pigmented spots and e is the most important one. And that's evolution or changing. As I alluded to earlier.

Dr. Winer Well, that's very helpful. I think something people really need to know and really need to pay attention to. So as we wind down, maybe I can just ask you one final question, which is for patients who have cancer and are at risk for skin problems, any final advice, something you want to tell people that they should watch out for just to help make it all a little bit easier?

00;28;02;28 - 00;28;33;10 Dr. Leventhal It's a great question. Something I say to all my patients is monitor your skin, your hair, your your nails, the health of of, you know, things that involve dermatology, inform your cancer team, the doctor, the advanced practice providers, the nurse, the pharmacist, if you experience anything early on. Because the sooner that we can help, the sooner that we can improve the symptoms of quality of life and manage the problems.

00;28;33;25 - 00;28;59;03 WNPR Dr. Jonathan Leventhal is the director of the Onco-Dermatology program at Smilow Cancer Hospital. If you have questions, email them to canceranswers@yale.edu, that episode and past editions of the program are available in audio and written form at Yale Cancer Center dot org. We hope you'll join us next time to learn more about the fight against cancer Funding for Yale Cancer Answers is provided by Smilow Cancer Hospital.