00:00.000 --> 00:16.500 Support for Yale Cancer Center Answers comes from AstraZeneca, the global biopharmaceutical behind a variety of innovative cancer medicines with a pipeline of investigational therapies. Learn more at astrazeneca-us.com. 00:17.100 --> 00:47.600 Welcome to Yale Cancer Answers with Dr. Anees Chapgar and Dr. Steven Gore. I am Bruce Barber. Yale Cancer Answers features the latest information on cancer care by welcoming oncologists and specialists who are on the forefront of the battle to fight cancer. This week, it is a conversation about surgical options for skin cancer with Dr. Kelly-Olino. Dr. Olino is an assistant Professor of Surgical Oncology and Dr. Chagpar is a Professor of Surgery at the Yale School of Medicine. 00:47.200 --> 00:57.800

Chagpar So, Kelly may you can start off by telling us a little more about melanoma, what it is, how common it is, kind of who gets it, and why we should care?

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Olino Well, melanoma is a type of skin cancer, so it is a subtype and unfortunately, it is more common than we would like it to be. So for men, it is the fifth most common cancer and women, it is actually the sixth most. Thankfully, many patients are diagnosed it in early stage due to efforts of their primary care doctors and dermatologists, but when it becomes an advanced stage, it becomes much more difficult to treat and therefore it is the deadliest type of skin cancer that we actually treat.

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Chagpar So we will talk about how can we detect it early? So what is melanoma look like, what should we be watching for?

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Olino So the classical teaching has to do with the alphabet, where people classically talk about the A, B, C, D, E, and then the F for if it kind of just looks funny or it feels funny, so anytime that you have a mole, many of us are born with them, many of us will acquire them, you know things that look like freckles or anything that does not look symmetric, if it bleeds, it has different colors to it or just anything that really changes over time and that is really the big key is to just keep an eye on these things and if you are not sure, ask someone.

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Chagpar And so, you know, we are now in the winter months, certainly, you know, we talk about melanoma in the summer months and we talk about using sunscreen and so on. Can people still get melanoma in the winter months?

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Olino They can and a lot of it will be dependent upon many times people's partners may notice something that is very, very common, hair dressers, there

is actually special program actually for cosmetologists or people who do hair, ha you know that looks a little funny because none of us actually examine our scalps and there is also melanomas that can happen underneath our fingernails and those are actually much more common in people who are Asian or African American and that can happen really at any time. So it is just a matter of in the summertime more people have more skin exposed, so more people are looking to say ha have you noticed that?

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Chagpar And so, I guess the one of key messages is you know, if you have moles it does not matter whether it is spring, summer, fall, or winter, you should be keeping an eye on these things and looking for that A, B, C, D, is it asymmetric, you know, are the borders irregular, is their color changes, or has it changed at all, is it you know getting larger in terms of diameter and so on, so that you really can bring this to your doctor's attention. Now, when you do bring it to your doctor's attention, what should they expect in terms of how is melanoma worked up?

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Olino So the most common way that it is worked up for the typical person is actually by the use of a biopsy where someone will sample as portion of the skin, it can be almost like a scraping, but kind of a deep scrape or you know you can use a little device that makes like a little punch, almost like a hole puncher, that then you examine that under the microscope and get information.

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Chagpar And so if you are told that this is melanoma, I guess part of it depends on its stage because you said that some melanomas are picked up early when treatment is easier, more affective, others are picked up late when there may be fewer options. So tell us about the difference between early and late. Tell us about how these things are staged, that kind of sets a framework of how they are treated?

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Olino Well the think that I find that most patients are surprised about when we talk about staging for melanoma, again we usually begin with the biopsy and when I tell them Oh you know this is less than a mm thick or if it is 2 mm or even thicken than that, many patients don't understand and they say, wow this is all good it is so tiny, because people have it in their mind a lot of cancers, they are talking about big, big masses. Melanoma likes to spread to the lymph nodes, which are little centers, almost kind of like transportation hubs on the subway where our immune system is. So even when things are just you know very, very small in terms of, we are talking millimeters of fractions of millimeters, they still have the potential to spread not only to these lymph nodes, these immune trafficking centers, but also to different organs like the brain or the lung or the liver and that risk is really in proportion to how thick the melanoma is.

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Chagpar And so give us a sense of how thick is thick and how thick is not so thick?

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Olino So think people will put a range of 1 to 1.2 mm when we talk about that and that is kind of how we have grouped our clinical trials when we studied it, anything above 1.2 to about 3 mm, we consider that kind of in the middle, anything greater than 3 mm, those are patients who are the most worried about.

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Chagpar And so is your treatment plan really dictated based on that thickness?

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Olino So for many patients it is one of the most important factors that we take into account. So for example if you had someone who came in with something that was about 4 mm before going straight to surgery in about 1 to 2 out of 10 people it may have already spread and that is important information when you are making a holistic treatment plan. So in that regard, those patients who are high risk with these thicker ones we would go straight towards well gosh has this spread somewhere else. For ones that are intermediate, then we look more towards the most likely for a stop which would be the lymph nodes and we have a discussion about sampling those.

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Chagpar So what takes this in kind of trunks, so the thick melanomas, those that are more than 3 mm thick, somebody goes, they see a mole, they have heard us here on Yale Cancer Center Answers, they went to their primary care doctor or their dermatologist, they got the punch biopsy, came back, melanoma and low and behold, it was 3 or 4 mm thick and they remember that you said that that was thick and you would be worried about distance spread in 10-20% of those patients. How exactly do you check for that distance spread and if there is distance spread, what happens then?

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Olino So let's say for example 4 mm that actually has some of the best support for checking early. The places where it will spread would be the brain and we have to do an MRI for that CAT scans are not very good at looking for melanoma in the brain and then other people would get either something called a PET scan which is a special type of scan where abnormal cells pick up more sugar and we see the more active on the scans and that commonly gives us a very good idea about whether or not something has spread, but we are always limited by how much our scans can tell us. So even if those are negative, it does not mean there may not be something floating in the blood stream that we just

have not been able to detect yet which is why we follow these patient so very closely.

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Chagpar And so if you do find that it has spread somewhere else the PET scan lights up, then what?

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Olino So if this were 10 years ago, the conversation would be entirely different, but we really have had major advances in 2 fields, one in checking mutations in tumors and we actually have some good agents for those specific types of mutations or changes in those tumors and we have also utilized new medications that actually have your immune system which we call immunotherapy and for melanoma, we have had some of the best successes in that field for any cancer.

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Chagpar And so you would be checking for these mutations and kind of using targeted, personalized medicine type approaches or immunotherapy, but are those approaches only if there is distant metastastic spread or do you use them also in the thinner melanomas or the intermediate thickness melanomas or the melanomas that have not spread to distance organs yet, may be or just in a lymph node or may be not even in a lymph node?

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Olino That is a great question and that is actually an area of active clinical investigation. So there are patients who have something thick where you check the lymph node and it is not in the lymph node and you say gosh, you know, I cannot believe it was not there and we say these patients are at such high risk, what do we with them, or we had patients whose melanomas may be are a little bit thinner and they have something that is a very small deposit in the lymph node and right now, we do not have a great way to predict who is going to benefit, so that is the topic of some clinical trials that are going on across the country.

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Chagpar To see whether these immunotherapies and these targeted therapies that are worked in metastatic settings with spread all over the body might be able to work in lesser stages?

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Olino Correct and not be toxic which is an important thing that we always to weigh, if there is no toxicity, we would say wonderful, let us use this on everyone, but we have to be cautious, you know these are powerful medications.

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Chagpar You know Kelly that is a great point because I think that when we talk about immunotherapy and we have talked a lot about immunotherapy on the show, people talk about it like harnessing your immune system and I think some people in our audience may think, well if it is your immune system that is just, you know, overpowering this cancer, it must be nontoxic. Tell us a little bit about the toxicity associated with immunotherapy that makes you kind of you kind of not use it necessarily on everyone?

11:11.600 --> 12:35.600

Olino So for the first approved immunotherapy dates back to the 80s and 90s and that is something called IL2 and you had to be actually an inpatient in a specialized intensive care unit and that was the first real treatment that we had where you were cured or you got very, very sick and you were not cured. When people talk about immunotherapy over the last 5 years, we talk about 2 major targets on T-cells. Some of the side effects are you damage to the colon and initially when these were first being used, we did not know how to turn off the immune system, now we know that people can get treated with steroids or other treatments, the other areas that are affected commonly is something called your pituitary gland which helps to control hormones from the brain and that is with one of the agents it is more common than the others, the thyroid gland is also a common targeted having disease and there is a couple of other sites including the lung, but those are little bit less common, but we do know it is always a double-edge sword, sometime when you see patients who have toxicities, many times we have seen people who are responding to the treatment, but like I said, we have just gotten a whole lot better at managing it and making it much safer than it was even 5 years ago.

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Chagpar So great work on the horizon in terms of using these therapies, potentially even for the intermediate and thinner melanomas. So what is turned to those intermediate ones, you know these are 1.2 to 3 mm, you do not really think that this has spread anywhere else in the body, but you said that you would check the first draining lymph nodes, tell us about that?

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Olino So Dohn Martin a number of years ago, pioneered a technique where we used dyes, like a tattoo dye that is blue as well as a radioactive dye that we actually have a special probe that measures where did the dye go and what we do is they are called sentinel nodes because what we say is while if the cancer were to have spread from the area in and around where we injected, where would be the first place that they would go, where is the first stop. We then selectively remove that lymph node and look at it under the microscope and say did it spread or not and that gives us important information after an operation to tell the patients while this is what we expect based upon the information that we have.

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Chagpar So we can check those first draining lymph nodes, we do the same thing in breast cancer. We are going to learn a lot more about melanoma in today's show, but today we have to take a short break for a medical minute. Please stay tuned to learn more information about surgical options for skin cancer and melanoma with my guest, Dr. Kelly Olino.

14:10.800 --> 14:27.600 Medical Minute: Support for Yale Cancer Answers comes from AstraZeneca, a global science led biopharmaceutical business committed to bring into market innovative oncology medicines that address unmet needs for people living with cancer. More at astrazeneca-us.com. 14:29.400 --> 15:14.400 This is a medical minute about genetic testing which can be useful for people with certain types of cancer that seem to run in their families. Patients that are considered at risk receive genetic counseling and testing, so informed medical decisions can be based on their own personal risk assessment. Resources for genetic counseling and testing are available at federally designated comprehensive cancer centers. Interdisciplinary teams include geneticists, genetic counsellors, physicians, and nurses who work together to provide risk assessment and steps to prevent the development of cancer. More information is available at YaleCancerCenter.org. You are listening to Connecticut Public Radio. 15:13.300 --> 16:01.800

Chagpar This is Dr. Anees Chagpar, and I am joined tonight by my guest, Dr. Kelly Olino. We were talking about surgical options for skin cancer and melanoma and right before the break, Kelly did such a fabulous job lying out for us how melanoma is actually staged, kind of the thinner melanomas, the intermediate thickness melanomas, the thicker melanomas, the thicker ones are really the ones where we worry about distance metastatic spread and where targeted therapies and immunotherapies have really found their home, but as we look at the intermediate thickness melanomas, Kelly you started talking about sentinel node biopsy, so actually checking those first draining lymph nodes to see whether the cancer has spread there, so if it is spread there, then what?

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Olino Well, in the last year, there have been 2 major trials that have actually changed how we manage this. If this was 2 years ago, I would have said while we remove all of the other lymph nodes and that gives us more information and that would determinate whether or not you would get any further treatment. These 2 trials that were done across the United States and Europe, however, showed that patients do not benefit by living longer or living longer without melanoma, so at that point now again, we were almost not necessarily starting again, but we have more answers to solve because at this point we have to base all of our treatment decisions based upon just that node sampling without having any further information and again this is an area that is under active investigation and the patient should really be prepared for a very thoughtful conversation in the clinic when we kind of weigh pluses, minuses and then how we follow people

now with ultrasound in the areas where those lymph nodes were removed to try and detect any changes early and the management is really dependent upon some of the factors under the microscope but also importantly the people that were taking care of, you know asking people to come in and getting surveillance every 4 months. For some people that is, you know, burdensome where they do not have access centers that are capable of doing that. So all of these things now have to be taken into account, so it becomes a very personalized decision for everyone.

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Chagpar So, I want to unpack that a little bit further, it sounds like in melanoma, like in many cancers, for example in breast cancer, we are doing less, so you check that for straining lymph node, historically if it was positive, you would take out all of the other lymph nodes because you would say well you know if it went to the first lymph node it might have gone to the second or the third or the seventeenth or the 25th, but now what you are finding is that you can actually spare patients the morbidity that lymphedema that is everybody is worried about by not removing those extra lymph nodes, but now you have only got that first draining lymph node. So if you got an intermediate thickness melanoma and that first draining lymph node has cancer, tell me more about this personalized approach that you take, like lets say somebody says I have no problem coming in for surveillance, you can ultrasound my armpit or my groin or wherever this melanoma went to. What happens with the melanoma itself in the skin, was that removed, what happens in terms of systemic therapy, are these people given chemo, are they given immunotherapy, are they given targeted therapies, and is there any role for radiation or is radiation really verboten in the setting of melanoma given the fact that the sun is radiation and that is how many people get melanoma?

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Olino Well we recommend almost undoubtedly removing the primary because if those grow they will cause symptoms, they can bleed, they make people terribly uncomfortable and usually the side effects of removing the melanoma of the skin, some of them can be quite big, but something we can get patient through. As far as getting further therapy, again we weigh the benefits for that particular patients versus the toxicity but we do not have an algorithm that we can use because the old one that we had is now obsolete and so that is why it is very, very important so every time that we have these patients and in many institutions what we will do is we will sit down with our tumor board and our tumor board is full of experts and medical oncology, dermatology, radiation-oncology and we all sit down together and make a very personal decision on a patient-by-patient basis with obviously some common themes, we know that certain characteristics under the microscope make us much more worried about the spreading, but again it is a really exciting time to be in the field because there are as many as question as they are answered, now you have asked about radiation treatment, there are certain subtypes of melanoma that are very sensitive to radiation and

not melanoma but there is a different type of skin cancer called a Merkel cell cancer those are very, very sensitive to radiation treatment. So but radiation treatment, if it spread to let's say your liver, your lung, sometimes we will use that as modality but it is not as common for the garden variety melanoma.

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Chagpar So, it sounds like you are kind of in unchartered territory, there must be some clinical trials that are out there to help you to figure out how you are going to develop algorithms for optimal treatment in the setting, yeah?

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Olino Yeah, so there are a couple of clinical trials that are underway in Europe, those are close to completing and they are using certain characteristics about whether or not the tumor is ulcerated which is an aggressive feature, the depth, and the amount of cancer that is in the lymph node that is what they have used and I think that will be done occurring within a year and there are very similar trials that are also going on in the United States. So it is not uncommon for people to be approached to say is this something that you would like to participate in, now for a thick melanomas or ones where there is just a hair of cancer in those lymph nodes. There are a few centers that will be opening within the next few months clinical trial for United States to answer that very question.

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Chagpar And so you know one of the things that I always like to hit home as a point on the show is how important clinical trials are to what we do, I mean they simply help us to find those answers to important questions that help us to define optimal therapy for patients down the line, but many patients may feel like well I do not want to be the human guinea pig, how do you approach that.

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Olino So, when I talk to a patient about a trial, first of all I assure them that I do not feel strongly one way or the other, because then I should not be offering them the trial, we have to have something called equipoise which is we are really on the fence about this and clinical trials are not for every patient, you know they are brave when they sign up for these, but many of the clinical trials are designed, like I said in a fashion that we do now know what the right thing to do is and it is I think better for patients to be in these trials because we follow them very, very closely and then the results could help other people and in my experience when we explain to cancer patients, they are the most thankful giving people and reason why I became a surgical oncologist was because of the people that I have the pleasure to take care of, so and this group with melanoma if you just look at what we have done over the last 10 to 20 years, it has all been because the patients have allowed for this to happen, they were brave souls to try a therapy that has never been tried before and look what has happened.

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Chagpar Yeah, I could not agree more. I think that we are so grateful to patients who participate in clinical trials and future patients are always grateful to patients who participate in clinical trials and I think that your points are very well taken, so the first is you know really when we are asking these questions is because we truly do not know the answer and so it does not matter whether you randomize to one arm or the other, the clinical trial would not exist if there was a known answer and we knew that one arm is better than the other and the other thing is that we also know that for the vast majority of patients, people who participate in clinical trials tend to do better than people who do not, just by the fact that many clinical trials randomize patients to either standard of care which is what we do today versus what we think might be better and so on average, people do better, but I agree with you 100% that it is really due to our patients that we have made all of the advances that we have. So we have talked a little bit about thick melanomas and intermediate grade melanomas, what about the thin melanomas? Let's say somebody picks up a cancer really early, it is less than a millimeter, what then?

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Olino So those have the best prognosis. So over 90% of these patients really have nothing to worry about ever again and that is what we would aim. If we had all of our druthers about us, if we had a choice for all our patients, we would want them to be ones that came in with very, very thin ones, but again I said about 90% but there are still a fraction of patients who will either go on to have another melanoma or even though they had a thin that we did not suspect would cause any trouble, it still does happen and if one thinks about the majority of people are coming in actually with these thin melanomas that it winds up being not infrequent and not to scare people, but that is why no matter what, we follow you for 5 years very, very closely and then we follow you annually after that, not only with your surgeon but also with your dermatologist, because again we want to detect everything as early as we can when we have the most amount of options for our patients.

26:16.900 --> 26:30.100

Chagpar What about treatment, Kelly? I mean is it just surgery for them, that you just resect the primary and then that is it or are you doing a something a little bit more just in case to try and prevent that 10% who will recur?

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Olino So we do not do anything more than what we need to do. So for those patients, we remove the melanoma and if they are thin and there is not any worrisome features, we do not even check the lymph nodes. We instruct all of our patients just like patients who are instructed to do breast self-exam to look at the area where we have removed the melanoma and then to also feel the lymph nodes that are in the closest area to that.

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Chagpar And so are there any predictors for who are going to be this 10% who recur, I mean because you can imagine that patients think great, I found this early…my surgeon took it out, got clear margins, chip shot 90% chance that it is never going to bother me again, but then who is going to fall into that 10%, like are there little factors that you look at that can predict that?

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Olino So in the case of thin ones, some of the things again I mention ulceration if there is not a lot of immune cells in the sample, those patients are at a little bit higher risk, there are certain gene changes, but those are really not well-defined and it is actually quite controversial whether or not we should be using those, they're used in things like some breast cancers and they have a special panel for that, but the word is it is still quite controversial in melanoma whether or not we should be using these for everybody, like I said it would be nice to tell people , you know you are all done and we can tell you with 100% certainty but we are not there right now. The patients that are risk of getting new ones because the same risk factors that caused you to get the first one did not go away. So the people who were you know sun worshippers at young age, there is about 10% of patients who have a family history where when you talk to them, it is just become very, very common in their family and even if we cannot tell them what gene it is, that just means that we are not smart enough to detect it yet, does not mean it is not there and then the other group of patients would be people who are born with a lot of moles, those patients have about a 10% increased risk compared to the average person and those patients should be followed and then people who are fair skinned, light eyed, but again, you know there are other people who never thought they could have a melanoma probably, the most famous patient was Bob Marley, so he died of melanoma that was underneath his fingernail and he was, you know, Jamaican.

29:10.500 --> 29:34.100

Dr. Kelly Olino is an assistant Professor of Surgical Oncology at the Yale School of Medicine. If you have questions, the address is canceranswers@yale.edu and past editions of the program are available in audio and written form at Yale-CancerCenter.org. I am Bruce Barber reminding you to tune in each week to learn more about the fight against cancer here on Connecticut Public Radio.