Funding for Yale Cancer Answers is provided by Smilow Cancer Hospital.
Welcome to Yale Cancer Answers with your host, Doctor Anees Chagpar. 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’s a conversation about the care of head and neck cancer patients with Doctor Benjamin Newton. Doctor Newton is an assistant professor of clinical medicine and medical oncology at the Yale School of Medicine, where Doctor Chagpar is a professor of surgical oncology.
Ben, maybe we can start off by you telling us a little bit more about yourself and what it is that you do.
I'm trained as a hematologist and a medical oncologist. I take care of patients with a wide variety of oncology problems in my community, and I'm particularly interested in the care of patients with head and neck cancers. So you know head and neck cancers is kind of like this really broad bucket, right? I mean when we think about head and neck. I mean, geez,
there’s a million things in there. So can you break down for us what you’re really talking about when you’re talking about head and neck cancers? Of course, when we talk about head and neck cancer, we’re really describing a number of cancers that can develop in or around the nose and sinuses, the mouth, the throat, and the voice. Blocks, and while these are distinct cancers, often with distinct treatment approaches, they’re kind of brought together together as a group, because they form what we call the upper aerodigestive tract, which has a surface layer of flat squamous cells. And most of these cancers form when previously healthy squamous cells change and grow out of control. So you know, when we think about these squamous cells that grow and kind of get out of control, are there other things that kind of link all of these together, certain risk factors, family history, other traits? I would say that the most important known risk factor is tobacco use. There are some evidence for a genetic predisposition to the cancer causing
effects of tobacco and in addition tobacco. And alcohol consumption together can have a synergistic effect. That means that they conspire together to make things even worse, and that repeated exposure of the lining of the upper aerodigestive tract to the cancer causing effects of tobacco and alcohol can cause cancer. And then we’re also seeing that there is a significant rise in recent decades of HPV related cancers as well. Now when we talk about HPV, most people think about cervical cancer, right? That’s true, but there are several cancer types that are caused by HPV, including cervical, vaginal, vulvar cancers in women, anal cancers, HPV, associated head, neck, cancers, of course, and then also, it causes genital warts in both men and women. And so you know when we think about head, neck cancers and we think about these risk factors. So certainly one thing that we can do in terms of primary prevention to reduce our risk is don’t smoke, don’t drink, don’t do both of them together because they are synergistic. Is there? Is there a threshold,
like a safe amount of tobacco or alcohol?
Is this dose dependent or is it really your recommendation that people abstain as much as possible? So we think of tobacco sort of being the main risk here, and alcohol as something of a cofactor. I think it’s agreed that that people shouldn’t smoke at all, and I know it’s generally very hard to stop smoking, but more than three out of five adults who have ever smoked cigarettes in the United States have been able to successfully quit. I think it’s harder to argue that people should abstain completely from alcohol use, but less is definitely more when it comes to this particular risk. And so and then and then with regards to HPV, any words of wisdom in terms of preventing an HPV infection? Absolutely so we are now using an HPV vaccine with the thoughts. Not that it, not that it only reduces the risk of cervical cancer, but that it can reduce the risk of HPV associated. Had a neck cancers as well. This vaccine was developed to
0:05:02.14 –> 0:05:05.83 prevent cervical cancers, of course.
0:05:05.83 –> 0:05:10.186 And so now we’re recommending that.
0:05:10.19 –> 0:05:13.746 That children 11 to 12 boys and
0:05:13.746 –> 0:05:16.159 girls get vaccinated for HPV.
0:05:16.16 –> 0:05:18.77 And the Centers for Disease Control
0:05:18.77 –> 0:05:20.51 also recommends HPV vaccination
0:05:20.58 –> 0:05:22.998 for everyone through age 26 if
0:05:22.998 –> 0:05:24.61 they’re not vaccinated already.
0:05:25.08 –> 0:05:28.587 So. Now if you think about the
0:05:28.587 –> 0:05:31.47 epidemiology of head neck cancers,
0:05:31.47 –> 0:05:33.857 these tend to occur in people as
0:05:33.857 –> 0:05:35.648 they get older, is that right?
0:05:36.42 –> 0:05:37.701 That’s that’s correct.
0:05:37.701 –> 0:05:40.263 I think when we’re thinking about
0:05:40.263 –> 0:05:42.422 HPV associated cancers where seeing
0:05:42.422 –> 0:05:45.37 this more in men and we’re seeing
0:05:45.37 –> 0:05:48.114 it more in in some younger
0:05:48.114 –> 0:05:51.74 patients sometimes aged 4050.
0:05:51.74 –> 0:05:54.722 We think about. For that reason
0:05:54.722 –> 0:05:57.124 we also sometimes will you know,
0:05:57.124 –> 0:05:58.159 think about whether it might
0:05:58.159 –> 0:05:59.49 make sense for some individuals,
0:05:59.49 –> 0:06:01.798 perhaps older than 27,
0:06:01.798 –> 0:06:04.683 to get the HPV vaccine.
0:06:04.69 –> 0:06:08.33 And in fact, these days this the
0:06:08.33 –> 0:06:11.79 vaccine is approved up through age 45,
0:06:11.79 –> 0:06:14.616 so patients can speak with their
0:06:14.616 –> 0:06:17.623 physician if they’re older than age
0:06:17.623 –> 0:06:20.218 27 about whether their individual
0:06:20.218 –> 0:06:22.26 situation lends itself well.
0:06:22.26 –> 0:06:25.446 To receiving the vaccination for HPV.
Why is there an age cutoff at all? I mean, when we think about vaccines like COVID, for example, which many of us now have become very familiar with, we really started vaccinating people who are older who were immunocompromised. Why is it with HPV that it’s kind of the reverse. We’re vaccinating children and really limiting vaccinations to people over the age of 46. The reason for that is because HPV vaccination is intended to prevent new HIV infections, but does not really treat existing infections or diseases. That’s why the HPV vaccine works best when it’s given before any exposure to HPV. And the thought is that as people get older, they’re more likely to already have been exposed to HPV. But of course, even if a person has been infected with one type of HPV, it may not be too late. To help protect oneself from certain cancers caused by other types of the virus. Cool so we’ve talked a little bit about primary prevention in terms of minimizing the the three main risk factors for getting a head and neck cancer. You know, the next issue is really the
secondary prevention, so you know, we often think about screening in terms of mammograms and pap smears and colonoscopies. And even low dose CT’s for lung cancer screening for people who are smokers. What do we have in terms of screening for head neck cancers, anything? Currently there are no screening methods that have been proven to increase survival rates for head and neck cancers. That being said, a screening physical examination of the neck, the oropharynx, which is that middle section of the throat that includes the soft palate, the base of the tongue and the tonsils. As well as the mouth has been pretty widely adopted as part of a routine dental examination, so it’s very important to keep current with the dentist. Also over the years within our community we have had head and neck cancer screening health fairs which are intended to catch some of these cancers as early as possible, and so let’s suppose you haven’t quite made it to the dentist as yet. Not saying anything but a lot of people don’t particularly love going to the dentist. What should people be looking for
in terms of signs and symptoms that might clue them into the fact it may be time to pay a visit to get something checked out, so part of the reason that we don’t have.

Solid screening tools other screening tools for head and neck cancer is that these cancers often present in early stages, with symptoms that themselves prompt people to seek medical attention. Some of the main symptoms that lead to the diagnosis of a head and neck cancer include swelling in the mouth or sore that doesn’t heal, a lump in the neck area, with or without pain. A persistent sore throat, a voice change, and sometimes even frequent nose bleeds or unusual nasal discharge. Now, it’s tricky because we all get these symptoms from time to time, and it’s not uncommon to see patients seek medical help for these issues and get prescribed antibiotics or decongestant decongestants.

But So what I really want to tell people is that if the symptoms persist, say for four weeks or longer, then they really should get checked out by a specialist.
Such as an otolaryngologist, also known as an ear, nose and throat doctor and so you know one of the things that you just mentioned is that these tend to present with symptoms that cause people to go to the doctor and they tend to be found at an early stage. So does that mean that most of these have a really good prognosis? In general, yes. So when we see Early stage. The neck cancers that are associated with HPV positivity, their survival is really good, around 80 to 90% five years in cancers that are not associated with HPV, perhaps more tobacco related, these cancers are generally associated with a lower five year survival, but it’s still around 50-60%. Is there a difference based on the etiologic factor? Do they cause different mutations in these cancer cells such that the cancers behave differently? The in the mechanism of cellular injury is different for HPV associated head and neck cancers and and not a HPV associated head and neck cancers. When in the absence of HPV association,
It’s generally tobacco exposure that drives the process and these carcinogens in tobacco tend to impact a gene called P53 which is a type of tumor suppressor gene and when this tumor suppressor gene gets mutated, the result is almost genetic anarchy and tumors that have a lot of mutations tend to be more resistant to treatments. And that most likely explains the basis of the difference that we see in outcomes over time.

So let’s suppose you find one of these areas. You find a bump in your neck that stayed there for more than a month, or a white plaque in your mouth. Or maybe you’ve had persistent nosebleeds, and these aren’t just the usual kind of. It’s really dry in here. Kind of. This is my usual Nosebleed. But this is nosebleeds that are constant and persistent. And you go and see the doctor. What should you expect?

Well, it’s likely that the doctor might represent a recommend a biopsy. We typically think about something called a fine needle biopsy, where we take some cells and examine them under the microscope.
to determine whether there are any cancer cells present, and if that should come back and render a diagnosis of cancer.

What happens next? Do people generally get scans to see whether this has spread anywhere else, and how common is it for head and neck cancers to spread to other parts of the body? Once we’ve made a diagnosis of head and neck cancer, we generally do obtain scans and then we start to get everyone together to discuss what to do. The care of patients with head and neck cancers is highly complex, so it needs to be both collaborative and coordinated. It requires a multidisciplinary team approach that leverages the combined experience of various physicians and other specialists to achieve the best outcomes. We always talk about, you know what? I want you to hold that thought because it does sound like it will be really complex and intricate, and I want to get into that conversation right after we take a
short break for a medical minute.
Please stay tuned to learn more about innovations in head and neck cancer with my guest, doctor Benjamin Newton.

Funding for Yale Cancer Answers comes from Smilow Cancer Hospital, where you can view videos from their survivorship team by searching for the Smilow survivorship playlist on YouTube.

The American Cancer Society estimates that over 200,000 cases of Melanoma will be diagnosed in the United States this year, with over 1000 patients in Connecticut alone. While Melanoma accounts for only about 1% of skin cancer cases, it causes the most skin cancer deaths, but when detected early, it is easily treated and highly curable.

Clinical trials are currently underway at federally designated Comprehensive cancer centers such as Yale Cancer Center and Smilow Cancer Hospital to test innovative new treatments for Melanoma. The goal of the specialized programs of research excellence in Skin Cancer Grant is to better understand the biology of skin cancer, where the focus on discovering targets that will lead to improved
diagnosis and treatment. More information is available at yalecancercenter.org.

You're listening to Connecticut public radio. Welcome back to Yale Cancer Answers. This is doctor Anees Chagpar and I’m joined tonight by my guest doctor Benjamin Newton. We’re talking about the care of patients with head and neck cancers and right before the break Ben you were mentioning the fact that this is really complex. So after somebody it finds a plaque in the mouth or a nosebleed plaque in the mouth or a nosebleed or has you know hoarseness or any one of a myriad of symptoms that could be attributable to a head neck? Answer once they seek medical attention and has a biopsy that confirms the diagnosis. Some scans are done and then you mentioned that this is really a multidisciplinary approach where you kind of get all of the specialists together to think about personalizing or tailoring the treatment plan to an individual patient. Can you tell us a little bit more about that? How does that work and what are those?
Conversations look and sound like anyways.

So once the data is already gathered, we always talk about treatment plans and what we call a tumor board and that contains medical oncologists like myself, radiation oncologists head and neck surgical oncologist as well as pathologists and radiologists and will generally end up developing plans that include surgery, radiation, cancer, medication therapy or some sequence of these or some combination. Always based on the, uh, based on the published evidence that we have, I think it’s really important to tailor therapies not only to the individual patients condition and their other health issues, but also to their priorities and values. What do you mean by that?

Well, we spend a lot of time thinking about the impact of cancer and its treatment on function. For example, a common scenario that occurs in my office is weighing various cancer medication therapy options with an eye towards the different side effects that might be experienced. Of course, we always want to minimize toxicity,
but in some cases there’s more at stake for one person compared to another. Perhaps, for example, my patient is a musician and I might normally be thinking of a medication that sometimes damages the part of the inner ear called the cochlea, which can result in loss of hearing. This person has more to lose in terms of livelihood and general quality of life and might benefit from our choosing a different drug. So I think that what’s required as we tailor treatments is that we truly know our patients and engage on a personal level with them in order to make treatment recommendations that ultimately serve them best. Now the other part of personalized medicine that we often talk about is really looking at not only the the patient and and their life and their values and and you know how they earn their livelihood, their social situation, which is all really important but also kind of the finer points of the tumor itself. That particular genetic mutations. Thinking about which drugs might attack a particular type of cancer, or.
does that play into, and if so, how?
It does we’re very interested in learning more about the tumor than we have been able to in the past. We like to learn about the molecular attributes of the tumor, and perhaps better understand what mutations might be playing a role in a particular person’s cancer. And there’s a lot of interest in developing tailored therapies that are designed to address specific vulnerabilities. We might say when a particular mutation is found.
You know, at the top of the show we were kind of talking about the fact that the head and neck is a really diverse kind of region. So talk a little bit more about kind of the landscape of a head and neck cancers and and kind of the generalities or rules of thumb that you kind of use or think about as you’re planning treatment strategies in all of these different areas. So it’s, it’s very complicated and very nuanced, but I think one of the things that we’ve.
Think about first is there an opportunity for surgery to eliminate
the disease and result in cure?
Sometimes there is,
but sometimes the consequences from a
function standpoint might not be desirable,
and so sometimes we’ll think about
replacing surgery with radiation or
combination of radiation and chemotherapy.
Sometimes we’ll use chemotherapy
at the very beginning to make
other treatments more feasible,
and sometimes we’ll use chemotherapy
after some of the more definitive
treatments to improve the odds of cure.
And so, you know, as we kind of
think about presumably this is
where this tumor board really
comes into play, where, you know,
each specialist is kind of putting
their cards on the table as it were.
This is how I can help, you know,
in this Symphony of instruments
that we have in that room with the
medical oncologists and the radiation
oncologists and the surgeons.
How can each instrument really help
the whole Symphony to sound better?
Is that right?
Is that how those decisions are made?
Pretty much, I think everyone wants to
offer the very best for the patients.
I think there is an exchange of ideas that allows the sort of collective consensus to emerge in a way that ultimately works best for the patient. And that’s what really matters. With these discussions is that we ultimately find what’s going to be most helpful. So the thing that you mentioned was that each of these modalities while it has its strengths to bring to the treatment plan in terms of either making other therapies more feasible in the case of medical oncology or trying to remove as much disease as possible in in the area of surgery and so on. Each of them also has toxicities and I can imagine that. While you know to your point when you were speaking about the musician, each of these toxicities may affect a given patient more or less. But all of these toxicities may really affect patients in terms of you know their hearing, their sense of smell. You know how much they can chew or
swallow their speech, and so on. Can you talk a little bit about how you can help patients with all of those side effects of treatment? So I think we have to acknowledge that we have a lot of people helping our patients get through their treatments. It’s important for any head and neck cancer group to have a wide range of support services available to help people. For example, speech and language pathologists. They help in so many ways they look primarily at communication and swallowing related issues relating to the cancer and its treatment, so it’s always important to involve these specialists early so that guidance can be provided to help limit the impacts of cancer. Treatments on swallowing functions. Social work is also incredibly important. Of course, receiving a diagnosis of cancer and getting cancer treatment can be incredibly stressful, and people arrive at this moment with different needs in their lives. And sometimes unmet needs can impact outcomes, too.
Whether there’s housing instability or a person doesn’t have a car but needs to come for their treatments nonetheless. Sometimes extra services and coordination are needed, and dietitians are also a very important part of the team. They make sure that patients have adequate nourishment during their treatment, they help to assess patient needs and adapt the treatment plan to ensure that adequate nutrition is available through and following their treatments. Nourishment during their treatment, they help to assess patient needs and adapt the treatment plan to ensure that adequate nutrition is available through and following their treatments.

Important to think about all of these other players that are also really important members of the team. Not just the physicians who who are trying to treat the cancer, but all of these other people who make that treatment palatable or at least a little bit more feasible.

Talk a little bit about what’s new in head, neck cancers and and clinical trials that might be going on that help to move the field forward.

What’s on the horizon? What can we expect? Well, I think one of the things that is very exciting and head and neck cancer is an evolving understanding of the sort of differential outcomes that we see.
in patients with HPV associated cancers.

It gives us the opportunity to think about how now and in the future we might fine-tune therapies just to give the people just the right amount of treatment and perhaps avoiding unnecessary Side effects.

So that’s incredibly exciting and another area that’s very exciting is the role of immunotherapy in the treatment of advanced head and neck cancers we are.

Now able to look at a tumor and assess something called a biomarker that helps us determine what the vulnerability of immunotherapy to immunotherapy that a cancer might have.

These drugs basically work by Invigorating the immune system and having the immune system doing the work of killing the cancer cell.

Well, so always exciting things on the horizon.

When we think about that team that you were mentioning, I would imagine that people involved in research are part of that team and that there may be opportunities for patients to get involved in clinical research and helping to kind of move the field forward.
Have you noticed that patients are really enthusiastic about that or are they a little bit more apprehensive thinking, you know, I’ll stick to what’s known rather than what’s unknown, of course, clinical trials? Are an incredibly important way of improving cancer treatments over time. You know, it’s important to remember that patient that today’s treatments were once tested in a clinical trial setting. So what we’re really trying to do when patients enroll in clinical trials is to define tomorrow’s treatments today. And you’re right, I think it can sometimes sound scary to a patient, the prospect of participating in a trial, especially when there are, as it were tried and true options. But that bravery and that generosity of spirit really is a key to progress. And I think it’s also important to have clinical trials available to patients who get care in community settings. We want these trial results to determine our management to be meaningful for the patients in our Community. And plus patients tend to do well on trials. Care on a clinical trial is excellent care. And of course we want to extend
these opportunities equitably.

All patients.

Yeah, that’s one thing that a lot of people may not realize is that in general, if you look at people who participate in clinical trials, they tend to do better than people who don’t,
in part because, as you say, Ben, you know we’re trying to develop tomorrow’s therapies today,
and so sometimes the only way to get those therapies is on a clinical trial.
Now. One other question that many people might have is if my doctor offers me a clinical trial. Does that mean that there is no option? Does it mean like there is no other choice that I’m kind of at the end and there’s no, there’s no other tools in the toolbox?
Not necessarily. Frontline clinical trials are very important so that we can lead out with better treatments in the future.
Doctor Benjamin Newton is an assistant professor of clinical medicine and medical 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
We hope you’ll join us next week to learn more about the fight against cancer here on Connecticut Public Radio. Funding for Yale Cancer Answers is provided by Smilow Cancer Hospital.