Welcome to Yale Cancer Center Answers with doctors Francine Foss and Lynn Wilson. I am Bruce Barber. Dr. Foss is a Professor of Medical Oncology and Dermatology, specializing in the treatment of lymphomas. Dr. Wilson is a Professor of Therapeutic Radiology and an expert in the use of radiation to treat lung cancers and cutaneous lymphomas. If you would like to join the conversation, you can contact the doctors directly. The address iscanceranswers@yale.eduand the phone number is 1-888-234-4YCC. This week, Francine and Lynn welcomed Dr. Benjamin Judson. Dr. Judson is Assistant Professor of Otolaryngology in the Department of Surgery at Yale School of Medicine and is an expert in the treatment of head and neck cancers. Here is Francine Foss.Foss Can you tell us a little bit about the whole area of head and neck cancers, what is involved in it and what do we consider to be the head and neck?Judson Usually when people talk about head and neck cancer, they are talking about a cancer that arises in the mouth, the throat, or the voice box and most of these cancers arise from the skin or the mucosa lining and just like you can have skin cancer on the outside, you can also have a skin cancer on the inside and that is usually what people are talking about when they say that there is a head and neck cancer, but we also see a whole hodge-podge of other types of cancers in the head and neck area, and so we take care of patients with those problems too. There are a lot of different things that we see, we see cancers arising from the salvia glands, thyroid cancers, advanced skin cancers, cancers in the sinuses and then inside the nose, so there is a lot of great diversity in the types of things that we see.Wilson Do you have a particular area of expertise within that or as a cancer specialist do you deal with any one of these various possibilities?Judson Obviously I have focused on all of these areas. It is a relatively specialized area. I do not see patients with other types of ENT or otolaryngology problems, just with tumors, really any benign or malignant tumor in this area.Wilson If someone has an ear ache, for example, you are not the type of ear, nose, and throat doctor that they are going to come and see.Judson Right, usually these people end up seeing another general otolaryngologist first or another physician and then end up seeing me.Foss Can you talk a little bit about the mouth, usually people will go to a dentist if there is something in their mouth, or an oral surgeon. Would those specialists deal with cancers in that area or would that come directly to you?Judson I see a lot of patients who first see a dentist or an oral surgeon and get sent on to me and actually the dentist plays a key role in screening patients when they are just seeing them for their usual2:51 into the program. routine examinations, and often times if they see something suspicious they will send them on to another otolaryngologist or directly to me.Foss How does the patient know that they may have a cancer in the head and neck area?Judson The symptoms are if there is a lump or swelling in the mouth, the neck, or the throat or if someone is having pain or difficulty swallowing or talking or breathing. If there is a painful sore in the mouth, if there is bleeding in the mouth or hoarseness, all those symptoms can come from lots of other benign causes too such has having a cold. So, usually if the symptom has been there for a month or more we recommend that someone

see a physician or an oral surgeon to have that evaluated.Wilson When we talk about tumors, we get concerned that that is associated with cancer, malignancy, things that are going to grow if not taken care of, but there are some benign tumors in the head and neck area. Tells us about those and how common they are.Judson It is a great questions because we do see a fair number of patients with benign tumors, and how common they are depends on where they are arising, for example, with the parotid gland, which is the salivary gland in front of the ear, most of those tumors, about 85% are benign. It is the minority that are malignant, but the benign tumors, benign meaning they can't spread somewhere else in the body, they can still be quite troublesome locally if they are unchecked. There is still a lot of care that goes into treating those patients with the benign tumors as well because as I said, if they continue to grow they can be quite problematic.Wilson Generally, they will continue to grow so we have to do something about them. We just do not get so worried that they are going to necessarily spread to a lymph node or to the lung or anywhere else in the body.Judson Right and usually early care is the key for a good outcome. When they are smaller they frequently are very easy to take care of with not many side effects. Of course, if you let them grow overtime, and the bigger they get, the harder they are to take care of.Foss Ben, you mentioned that if something is there for a month, you should have it biopsied, so a lot of people get these sores in their mouth for various reasons, when do they actually have to worry about that?Judson Not necessarily biopsied, but just see someone. If it is in the mouth, an oral surgeon or a dentist, or an otolaryngologist, ear, nose and throat doctor, or even a primary care doctor to start and just have someone take a look at it.Foss Do these kinds of tumor arise in both children and adults? Can you tell us some of the risk factors?5:37 into the program.Judson We do see tumors across the full spectrum of ages. The risk factors are a really interesting area because they have been changing recently. The traditional risk factors are smoking and drinking and each of these alone increases someone's risk for developing a head and neck cancer a little bit and together, if you smoke and drink, your risk is multiplicatively increased. Historically, most patients have had both; they have been smokers and drinkers at some point in the past or ongoing. The peak age in which patients presented was in their 60s and 70s and historically patients were mostly male because of the smoking patterns in this country. Over the last several decades, we have seen a couple of changes. The first is we are seeing more and more women with head and neck cancers because more and more women have been smoking for long enough to put them at risk for developing head and neck cancer, and then the other change, which is really changing the face of head and neck cancers, is that we are seeing it in more and more young people who are never smokers and never drinkers. So, for someone who is a never smoker or never drinker, the peak age for presenting with a tumor is in their 40s. It is really a different patient population, and the younger patients who are these never smokers, never drinkers, are more balanced in gender, so more equally distributed with men and women.Foss Can you talk a little bit about the risk factors in that younger population? We hear on the radio

now about this HPV virus and whether that might be something that is relevant?Judson A great question, that is absolutely what seems to be driving up the head and neck cancers in these patients and there is truly an epidemic, it is a very small epidemic of HPV or human papilloma virus associated cancers in the head and neck and HPV has been long known to cause cervical cancer in women and it seems to be a more recent event that it is also causing certain types of head and neck tumors. There has been research that has shown that high risk sexual activity like having a very large number of sexual partners over one's lifetime puts people at a slightly increased risk for developing one of these HPV associated head and neck cancers.Wilson You had mentioned a little bit about symptoms, just to review that again, you might have a new lump or bump in you neck, pain, bleeding, name some of the other things that might be of concern if you heard the story from a patient in terms of symptoms.Judson One of the key things is the longevity of the symptoms, for example, hoarseness is a symptom that is frequently the presenting symptom for someone with a problem, but you know, most people with hoarseness do not have a head and neck cancer, it is when it is persistent, for a month or more, just does not go away, then it is worth having someone check it out.Foss Are these areas usually painful?Judson They often can be.Foss I want to get back to one point that you had made earlier about the smoking and drinking because9:02 into the program.that may be something that a lot people do to a minor degree, and I guess the question is, how much drinking and how much smoking predisposes you? Is it really the extreme individual who has a higher risk or would it be somebody who just maybe has a casual drinking history for a number of years?Judson There does seem to be a dose response relationship with smoking and drinking meaning, if you smoke a little bit, your risk of developing a head and neck cancer goes up a little bit, but if you smoke a lot, it goes up a lot. The same thing is true for the drinking. Even a little bit of smoking or a little bit of drinking does increase your risk for developing head and neck cancer, especially if you do both, but of course if you do both a lot, then your risk has increased a lot.Foss Are there any genetic tests that we can use to predict who might be more susceptible?Judson There is a lot of investigation in this area. There is nothing clinically or commercially used. There are some studies, which have suggested genetic changes, but there is nothing specific. There are few known genetic diseases that predispose to head and neck cancer. There is one in particular called Fanconi's anemia, which is a rare disease and those patients we know are at high risk for developing head and neck cancers.Wilson Ben, how is the diagnosis made? I know the answer to that certainly depends on where the problem is, but let's take the example of a man who has been hoarse for five weeks and it is getting worse and they are sent to you for an evaluation. Talk us through that office visit, and what your next steps would be to make the diagnosis?Judson Everything starts with talking to the patient and really getting the whole story of what he is experiencing and what his history is and then the physical examination which in that case would probably include Flexible laryngoscopy, where we use a little scope to actually look at the voice box while the patient is in our office on the

day that he came in, and often that alone is enough to help figure out if there is something to worry about or not. And as I said, there are a lot of reasons to be hoarse, they are not worrisome and so often times we can reassure a patient at that point and say, there is a benign cause for your hoarseness, but if there is something suspicious then it might warrant a biopsy, and as you suggested, if it is an area where we can access just in the office, we will do a biopsy in the office. If it is somewhere where we cannot get to comfortably, then sometimes it is something that is done in the operating room just so that the patient can be asleep and comfortable for the procedure.Foss So once the patient has a biopsy that shows a head and neck cancer, what is the next step?Judson Along with the physical examination, usually we get some imaging of the area where the cancer is

and also of the neck and chest. Head and neck cancers are best treated in a team or multidisciplinary approach, and so at that point usually we will evaluate the patient as a team.12:13 into the program.Wilson When you make a treatment decision as a team, and say it is going to involve combined modalities, talk us through a scenario of what those treatments might be, and how they would be combined?Judson This is where I think it is very important to be treated by a group of specialists because the decisions are very complicated and I think it is important to really understand the patient and their problem so that the treatment can be tailored to that person and their problem specifically. We want to maximize the effectiveness to cure them of their problem, and also minimize the side effects. In general, the treatments can include radiation, chemotherapy, or surgery, or some combination of those, and so for smaller tumors usually it may be radiation alone or surgery alone, for more advanced tumors often there is a combined treatment, so it may be radiation and chemotherapy or surgery and radiation or sometimes all three, so surgery, chemotherapy and radiation together.Wilson It is obviously complicated and that is why there is an advantage to having a team approach with all doctors involved making the decisions at once. We are going to take a short break for a medical minute. Please stay tuned to learn more information about head and neck cancers with Benjamin Judson.MedicalMinute There are over 11 million cancer survivors in the US and the numbers keep growing. Completing treatment for cancer is a very exciting milestone but cancer and its treatment can be a life changing experience. Following treatment, the return to normal activities and relationships may be difficult and cancer survivors may face other long term side effects of cancer including heart problems, osteoporosis, fertility issues and an increased risk of second cancer. Resources for cancer survivors are available at federally designated comprehensive cancer centers such as the one at Yale Cancer Center to keep cancer survivors well and focused on healthy living. This has been a medical minute brought to you as a public service by the Yale Cancer Center. More information is available atyalecancercenter.org. You are listening to the WNPR Health Forum on the Connecticut Public Broadcasting Network.Wilson Welcome back to Yale Cancer Center Answers. This is Dr. Lynn Wilson. I am joined by my co-host Dr. Francine Foss. Today,

we are joined by Benjamin Judson and we are discussing head and neck cancers. Ben, getting back to what we left off on in the first part of the show, we are talking about treatment options and how the decisions are made, tell us about the side effects of these various treatments, surgery, radiation, and chemotherapy.Judson All the treatments do have side effects and a lot of what we are doing when we make a recommendation for someone that is tailored to their specific situation is to try to minimize the side effects. Surgery involves incisions and scars that can involve the neck or the face, sometimes there can be scars in healing on the inside as well. Radiation therapy also can cause scarring and15:39 into the program. fibrosis and dry mouth, so it is really trying to minimize those side effects and that is the major part of the focus in terms of coming up with the treatment recommendation.Foss If there is an instance where say there is damage to the vocal cords, are there ways to get around that? Are there prosthetics? I know that some people have these voice box insertions.Wilson With very advanced cancers, we do everything we can to preserve all the structures and to maximize the functioning of the individual, but sometimes in order to cure someone we do have to make a sacrifice in terms of function and part of our team includes speech therapists, who are a critical part of the team, who can work with us to help people restore their voice and there is a whole science to that and multiple approaches can be used.Foss Is there minimally invasive surgery that is done and how do you go about making a decision about which patient might be a candidate for that kind of an approach?Judson The advances over the last 10 years or 20 years in this area have been in minimally invasive treatment and it involves minimally invasive surgery and minimally invasive radiation therapy. I am not a radiation expert at all, but I see the effects and basically with the radiation, it's targeting more specifically just the tumor to try to spare the normal tissue so that there are less side effects, and with minimally invasive surgery, it is using new technologies to go through the mouth to remove the tumor without any incisions on the outside that we could not do before.Wilson Is robotic surgery playing a role in the treatment of head and neck cancers?Judson It is, it is an exciting area and we are using the robot for this here at Yale. We are the first hospital in the state and one of the few hospitals in New England who are doing this. The robot is the same robot that is used frequently to treat prostate cancer and GYN cancers, and it was just FDA approved for the use in the head and neck about a year ago, and it allows us to go through the mouth to remove small to medium size tumors that we could not get out previously.Wilson And is that just because literally you cannot fit your hands inside somebody's mouth, but you can get these robotic instruments inside, is that really the key advantage?Judson That is exactly the idea and the technology is incredible when you actually use it. The visualization is incredible. You actually feel like you are inside someone's throat with a view that you could not get in any other way, and you are able to control the robot arms and perform very delicate maneuvers inside that you could not dream of doing without the robot.Foss So recovery from that kind of a procedure must be a lot quicker than from a fairly major operation?Judson A

lot quicker, and many patients are not a good candidate for that, but for those that are, it is a18:51 into the program. huge difference maker for them. It can mean one or two days in the hospital as opposed to two weeks in the hospital.Foss In terms of functional things, obviously eating is one of the things that we have to deal with after that kind of a procedure. How often are patients unable to eat after they undergo some kind of head and neck procedure, and how long does it take for the patient to get back to normal?Judson It can take quite a long time and usually it is the patients with advanced cancers that have problems and have a slow recovery and usually those patients are treated with surgery and radiation, both of which impair the swallowing function, and so there are strategies to allow them to supplement their nutrition while they are healing, but it can sometimes even take weeks or months until their swallowing restores and there are patients who ultimately never are able to swallow the same way.Foss Do a lot of the patients have feeding tubes placed, like feeding tubes in their stomach while they are undergoing these procedures?Judson Most of the patients do not, but certainly some do. Those who are at risk or who are suspicious of being at risk, they are going to have a hard time, or if someone is already, before treatment, having a hard time swallowing that much food and their nutritional status is not good, it is important that we supplement them and get them as strong as they can be to get them through the treatments.Wilson Generally when a patient gets an operation, are there some cancer operations that do not require an overnight hospital stay? Or are a lot of these things requiring several nights in the hospital, what is sort of the general philosophy these days?Judson It is the whole spectrum and it really depends on the size of the tumor and the area where the surgery is occurring. We do have patients who come in and have a procedure to remove a cancer or tumor and go home the same day, and then we have other patients who are in the hospital for two weeks and then there is everything in between.Wilson Do we have management strategies for a patient who, for example, gets dry mouth from a course of radiation treatment? Are there things that can be done to help the patient, from your perspective, who is in that situation?Judson Absolutely, there are things that they can do, and it is important to help the patient manage their swallowing and their symptoms, and the saliva also plays an important role in protecting the teeth, so it is important to have them set-up with a dentist to take care of the teeth, which we can do as part of our team as well.Foss Do most of the head and neck cancers stay localized to the head and neck or do they metastasize to other parts of the body?21:22 into the program.Judson They can metastasize elsewhere, usually the first place they go is the neck, and so oftentimes we are treating both the primary tumor as well as the neck to make sure we are curing or treating any metastasis from the primary tumor to the neck.Foss In what cases would you actually use chemotherapy?Judson For the most advanced cancers, there are some excellent studies showing that combining chemotherapy with radiation can improve the effectiveness of the radiation. The chemotherapy alone generally is not a curative treatment.Wilson We mentioned human papilloma virus, HPV, earlier in the first part of the show

and you talked about how that is sort of changing the face of things because patients are younger and younger who may have HPV-related disease, but how about their treatment? I understand there are some indications that, although we are seeing patients with head and neck cancers who are younger that may have a relationship to HPV, a lot of these patients can do very well, is that correct?Judson That is correct. Stage for stage, patients with HPV, or human papilloma virus associated cancers, do better than their counterparts who have maybe smoking and drinking related cancers. We still do not know if we can safely deintensify or lessen our treatments, but that is an area of active investigation. Because the side effects can be quite significant and these patients tend to be very, young patients in their 40s, at the peak of their productive time in their life, I think everyone is working to see if we can safely deintensify the treatment to lessen the side effects that they are having.Wilson And by that you mean lessen the radiation dose, or a cancer that traditionally might have required chemo and radiation may just get radiation alone, that sort of thing?Judson Those are the two areas. It may be to just treat with radiation as opposed to chemotherapy and radiation, and then the other area is to treat tumors with surgery upfront and it may be a lower dose of radiation or sometimes just surgery alone and I think again it is a select group of patients, but if the patient can have a surgery say with the robot through the mouth, spend a couple of days in the hospital and that is all the treatment they need, that is much better than what they will experience if they have to have more intensive treatment.Wilson Are there some patients that have to get all three modalities, they get surgery, chemotherapy, and radiation, or are there situations where we plan perhaps to just do surgery, but something is discovered at the time of the pathology evaluation, which we feel requires radiation afterwards? I know that is complicated, but talk a little bit about that for our listeners.Judson Sometimes we do plan right off the bat to use all three if the cancer is very advanced, but there are other times when let's say, initially we plan to just do surgery and maybe radiation, but if we find, when the pathologist is evaluating the tumor, that there are some factors which indicate that it is a24:30 into the program.particularly aggressive cancer, then we might want to add chemotherapy with the radiation, so then the patient might end up with all three treatments.Foss After a patient has had effective therapy for head and neck cancer, how often do they relapse?Judson We follow the patients after treatment very closely, certainly for the first five years and we are looking for two things, the first is to make sure that the tumor itself has not come back and the other thing is to make sure that they do not develop a second cancer, because we know that patients who have exposure to the risk factors for the first cancer put them at risk for developing another one. Just like if you have a skin cancer and you have been in the sunlight, you need to see a dermatologist a couple times a year; similar idea for head and neck cancers.Foss Are there prevention strategies that you put in place at that point to try to prevent those second malignancies?Judson The first prevention strategy is to avoid the risk factors. Smoking cessation is a very important area, and there is a whole smoking cessation service now that we work with, and so we

work very closely with the patients because we know that the treatment is more effective if they stop smoking, and the risk of them developing another cancer is also decreased if they stop smoking, so I think that is the most important thing we do.Wilson After treatments are all finished and the patient seems to have gotten through the acute recovery phase and they are seemingly doing well again, what sort of follow-up program do you recommend? Do they need to come for check-ups, how often does that need to happen that we do tests and x-rays, what is involved?Judson The most important thing is just physical examination, so usually we will have the patient come every three months for the first year or two and then maybe every four months and then every six months, and then every year. The risk of something popping up again is highest closer to the completion of treatment.Foss What do you think is the future for the treatment of head and neck cancers? Are there some exciting advances that we should know about?Judson I think we are going to see more of this minimally invasive technology, both in terms of radiation treatment and in terms of chemotherapy as more targeted treatments are coming up and in terms of surgery. We are going to continue to see that trend, and the other area is going to be early detection because we know patients who have smaller tumors that are detected earlier do much, much better. We do not have good recommendations like we do for the prevention of cervical cancer in women,27: 18 into the program. we do not have recommendations for screening for head and neck cancer, but that is an area of intense research and investigation.Dr.Benjamin Judson is Assistant Professor of Otolaryngology in the Department of Surgery at Yale School of Medicine. If you have questions or would like to share your comments, visityalecancercenter.org, where you can also subscribe to our podcast and find written transcripts of past programs. I am Bruce Barber and you are listening to the WNPR Health Forum on the Connecticut Public Broadcasting Network.