Support for Yale Cancer Answers is provided by AstraZeneca, working to change the cancer paradigm thorugh personalized medicine. Learn more at astrazeneca-us.comWelcome to Yale Cancer Answers with doctors Anees Chagpar, Susan Higgins and Steven Gore. I am Bruce Barber. Yale Cancer Answers is our way of providing you with the most up-to-date information on cancer care by welcoming oncologists and specialists who are on the forefront of the battle to fight cancer. This week Dr. Anees Chagpar welcomes Dr. Wendell Yarbrough and his patient, cancer survivor, George Brandt. Dr. Yarbrough is Professor of Surgery in Otolaryngology and of Pathology and Section Chief in Otolaryngology at Yale School of Medicine. Dr. Chagpar is Director of the Breast Center at Smilow Cancer Hospital, and she begins the conversation with George Brandt.Chagpar Mr. Brandt, why don't we start with you because I always think that the patient's story is always the critical piece, it is why we do what we do. Tell us about your journey through cancer. How did all of this start?Brandt In summary, I am a bad example because I did not do things that I was supposed to do, like screening. I did not understand the risk factors. I did not understand that everybody was at risk. So, I was just merrily going along in my life and woke up one morning at 2 o'clock in the morning in a hotel room in Los Angeles with blood coming out of my mouth.Chagpar Oh my gosh! I can just imagine I would be shocked, amazed and really scared.Brandt I was definitely surprised and definitely scared. I woke my wife up who was with me and said I am going to go get this checked out in the emergency room, I will see you in the morning, and she said, "no I don't think so, I am coming with you. And we got lucky because what had happened was there was a tumor and it had pushed up and broken a blood vessel. And the blood vessel was the first sign I had. I had no symptoms of anything and that was the first sign, and the doctor there fortunately said, "okay, we are going to cauterize this and stop it, I am going to do a biopsy," and he said, "you have got cancer, you need to get help." So, I got back here and got help. Chagpar All of that happened in the emergency room?Brandt Yeah. The emergency room there kind of failed and I had an operation 10 years before at the house clinic, and so my wife called the house clinic and said find us a better doctor, and they found us a better doctor who was smart enough to figure out what was going on.Chagpar Okay. So, you fly back here and then what happens?2:48 into mp3 file https://ysm-websites-live-prod.azureedge.net/cancer/2017-YCA-0402-Podcast-Yarbrough_299397_5.mp3Brandt My doctor connected me with somebody else who looked at it, who then connected me with Dr. Yarbrough. And Dr. Yarbrough took a look at it and said "okay, we are not to panic here, but yeah, we have these options," and there was one option which was the operation, another was radiation. And we chose the operation, and Dr. Yarbrough can tell you the details of it, but we did the operation and they checked for spread and said "okay, we do not have to do any chemotherapy or radiation follow-up, you just have to visit us every week and a half." I am exaggerating. Chappar I'm sure it felt like every week and a half. Tell us a little bit about what this cancer was at the time that it presented?Yarbrough It is exactly the story that George told you. Basically, head and neck cancer can

present with very few symptoms, and he in some ways is very fortunate that he had the bleed because his tumor was still very small at that point. And there are not a lot of people who know about head and neck cancer. There was a recent study that was done that showed that the vast majority of people in the United States know nothing about head and neck cancer, do not even know what head and neck cancer means. And what it does mean is cancers of the tongue, the throat, the voice box and some cancers of the salivary gland. But with this type of tumor, it is very treatable if it is caught early when it is small and there are basically several options for treatment. The earlier the tumor is caught, the fewer treatment modalities that the patient has to undergo and that means the better their life is going to be for the rest of their life. And the higher chance of cure. So, his tumor was basically a small tumor of the tonsil. It was not caused by smoking, and there are two basic causes of head and neck cancer – smoking and a virus called the human papillomavirus. The human papillomavirus associated tumors tend to be smaller and arise in the tonsils, but frequently they present with a neck node or a lump or bump in the neck, and that can be the only sign sometimes Those tumors are very treatable if they are caught early, and basically we did the surgery using a robot through the mouth without incisions on the neck except to remove lymph nodes. And after doing that, he was able to get out of the hospital within several days, go back to a normal life, and without radiation and chemotherapy, able to not have the long-term problems associated with that. Chappar So, the risk factors are really only those few things - smoking and HPV?Yarbrough That's right. The vast majority of these tumors are caused by those two things. There are a few people who do not smoke and their tumor is not HPV associated, but that is a minority. Chappar Mr. Brandt, had you ever smoked? 6:32 into mp3 filehttps://ysm-websites-live-prod.azureedge.net/cancer/2017-YCA-0402-Podcast-Yarbrough 299397 5.mp3Brandt I had never smoked and I had no clue that I had HPV, and I had zero symptoms until there was blood coming out of my mouth, which kind of gets you to really three main points building on what Dr. Yarbrough said. One is, everybody is at risk, even if you do not think you are at risk, certainly if you are not smoking, you are at risk. Two is, the earlier you catch it, the better because I got lucky, and because I got lucky we were able to catch it and I was back at work within 2 weeks. So, I was really pretty fine pretty fast and I have stayed fine for 3 years or whatever it is. Knock wood. But you put those two together and it says, I do not want to be harsh, but anybody listening, you are kind of a moron if you do not get the screening. Because you are at risk and the sooner you catch it, the better things are going to go for vou. Chappar Let us talk about screening. Because a lot of people have heard about breast cancer screening and they go in to get their mammogram. And people have heard about colon cancer screening and even though they do not really like the idea of having a colonoscopy, they go and get their colon checked. But nobody really talks about head and neck screening. Dr. Yarbrough what are we talking about here?Yarbrough It is a very simple and easy screening. It is basically looking in somebody's mouth and throat with a headlight so that you can see the surfaces that you are looking

at and feeling the neck for lumps or bumps. There is no imaging required, no radiation like chest x-rays or mammograms or anything like that. And one of the key things about the screening is letting patients know what the risk factors are, which as George just said, it is basically everybody in the United States because 70-80% of people in the United States have been exposed to the human papillomavirus, which is a major risk factor. For the screening, you come in, it takes about 5 minutes, you sit in a chair, you do not have to disrobe, someone looks in your mouth, feels your neck, makes sure that everything looks okay and then tells you about the signs and symptoms, and that is really the key, because if you do have blood coming out of your mouth and it stops, do not ignore it, go get it checked out. If you do notice a lump or bump in your neck, do not ignore it, go get it checked out. If you have a sore spot in your mouth that lasts more than about a week, do not ignore it, go get it checked out. If your voice changes and you are hoarse and you think it is getting a little better or a little worse, but it has been a month and you are still hoarse, go get it checked out. Those signs and symptoms are signs of early cancers and those early cancers are the ones that can be easily treated. Chappar How often should people get screened? I mean, if everybody is at risk and they do not have any of the symptoms that you described, most people are going to say, "I am fine."9:24 into mp3 file https://vsm-websites-live-prod.azureedge.net/cancer/2017-YCA-0402-Podcast-Yarbrough 299397 5.mp3Yarbrough We recommend screenings usually twice a year and that is done primarily these days by dentists and dental assistants. They are really good now and they are trained to look in people's mouths. I am sure if you have gone to the dentist and got a cleaning recently, you notice they are feeling your tongue and they are looking at both sides of your mouth. And so, they are the primary people that are doing a lot of the screening. There are also free screenings that are usually once or twice a year in the community, and we have some coming up in the New Haven area, in the Bridgeport area and in the Greenwich area. The New Haven one is April 7, 2017 on a Friday, the Bridgeport one is April 21, 2017, also on a Friday and the Greenwich one is May 5, 2017, also on a Friday. So, these will be available, and they are during the day, you come in, get screening and go back to whatever you were doing, it really takes about 5 minutes to get screened. Chappar And so people should be getting this screening twice a year and going and seeing either their dentist or going to a community free screening or even seeing your family doctor?Yarbrough That is right. The dentists, most people go to the dentist twice a year or at least once a year, and then if you only go to the dentist once a year, those other options you mentioned are great options, and the primary care physicians will feel your neck and you can encourage them to look in your mouth. It is not something that they do routinely and that is something that we really have been working on through the taskforce for early prevention, to have patients screened by their primary care physicians.Chagpar We often talk about cancers and we talk about family history. Did anybody in your family have a history of cancer or head and neck cancer in particular that you would kind of be thinking "Jeez, maybe I am more risk." Brandt No. I do not think anybody in family had head and neck cancer. My father had a cancer 50 years

ago, which he got treated and then lived another 45 years. Chagpar So, seriously no risks. Like, you just were minding your own business, went to sleep perfectly well and woke up at 2 o'clock in the morning with blood coming out of your mouth.Brandt Which is exactly the point, and to emphasize the point, I was lucky. The people that, it is really hard to ignore blood coming out of your mouth. It is easier to ignore some of these things like a lump on your throat or feeling a little hoarse or some of the things that Dr. Yarbrough was describing, and I think there are really two points. One is, if you think it is strange, it probably is strange, go get it checked out. But the bigger point is, 12:33 into mp3 file https://ysm-websites-live-prod.azureedge.net/cancer/2017-YCA-0402-Podcast-Yarbrough 299397 5.mp3get ahead of the curve and there are all these ways of getting it checked out in advance; dentists, doctors, public screenings, five minutes can just make such a huge difference, it is just, to me it seems like a no-brainer. Yarbrough To your point, I think Anees, this HPV-associated head and neck cancer is a relatively new thing. There were very cases before the year 2000. But it has been a real epidemic since then. It has increased exponentially, and now HPV-associated head and neck cancer is the most common HPV-associated cancer in the United States, which means it is more common than uterine and cervical cancer, and most people of course know that uterine and cervical cancer is caused by HPV, but if you count the number of people with cancer of the throat who have HPV-associated cancer, that is more than the number of women with uterine and cervical cancer caused by HPV in 2016. That is how rapidly it has been increasing.Brandt To underline the point, it means that just because there was no family history because this is a relatively new growth area, you cannot discount it because you do not have a family history, everybody is at risk. Chappar Everybody is at risk. We are going to learn more about head and neck cancer after we take a short break for a medical minute.MedicalMinute Support for Yale Cancer Answers is provided by AstraZeneca, a biopharmaceutical business with a deep-rooted heritage in oncology and a commitment to developing cancer medicines for patients. Learn more at astrazeneca-us.com.There are many obstacles to face when quitting smoking, as smoking involves the potent drug nicotine, but it is a very important lifestyle change, especially for patients undergoing cancer treatment. Quitting smoking has been shown to positively impact response to treatments, decrease the likelihood that patients will develop second malignancies and increase rates of survival. Tobacco treatment programs are currently being offered at federally designated comprehensive cancer centers such as Yale Cancer Center and at Smilow Cancer Hospital. Smilow Cancer Hospital's tobacco treatment program operates on the principles of the US Public Health Service Clinical Practice All treatment components are evidence based and therefore all Guidelines. patients are treated with FDA-approved first-line medications for smoking cessation, as well as smoking cessation counseling that stresses appropriate coping skills. More information is available at YaleCancerCenter.org. You are listening to WNPR, Connecticut's public media source for news and ideas.15:15 into mp3 file https://ysm-websites-live-prod.azureedge.net/cancer/2017-YCA- 0402-Podcast-Yarbrough 299397 5.mp3Chagpar Welcome back. We are talking about head and neck cancer, and for those of you who were not with us before the break, we were talking about the importance of getting You do not need to have symptoms, you do not need to have a screened. family history, everybody is at risk. One of the questions that I have for you is that a lot of times people may say, I do not want to know what I do not want to know, and I am going to avoid getting screened because I really do not want somebody to tell me that I have got cancer. What was it like for you when you woke up at 2 o'clock in the morning with blood coming out of your mouth, you went to the emergency room, they finally got you to a clinic, somebody did a biopsy and said, "Mr. Brandt, you have cancer." What was that like?Brandt We've got to separate the three things, four things. One was, waking up with blood coming out of my mouth. Which is really unpleasant, and does not have to happen. Second one was, the emergency room which was the hospital in California that was just useless. And then, I got to a good doctor who stopped the bleeding and did this biopsy, but I did not get the results of the biopsy for 24 hours. So, I was actually in the middle of a workshop and he called me and I called him on a break in the workshop, not the perfect moment because I had to get my head back in the game for the workshop that I was facilitating. And it was jarring, it was disturbing, it was upsetting, it was not good. This is not something you ever want to hear at that moment. Chappar One can only imagine how devastating it is. I have to ask you another question just for my own personal gratification. I am always curious about how patients like to receive their diagnosis. A lot of physicians will call the patients on the phone because they want to get you the results in the most expeditious way. I tend not to do that. I tend to want to see people in the office. Did it make a difference to you?Brandt Yes. I think it is about the patient, and don't take this wrong, it does not matter how you like to give news, I think it is about how the patient likes to receive news, and different patients will process information differently and ridiculously logical and straightforward, and for me, I really did not care about the phone, I just wanted to get the news fast so that I could act on it. So, my questions when I got the news, actually my question was, "okay, do I have to come back to you now, do I have to go to the hospital here, or can I go home and get it treated there?"Chagpar And they said, go home.Brandt He said go home. He said go see the appropriate doctors at home sooner rather than later, but no you do not have to come into the hospital and be operated on today.18:37 into mp3 filehttps://ysm-websites-live-prod.azureedge.net/cancer/2017-YCA-0402-Podcast-Yarbrough 299397 5.mp3Chagpar And so you felt comfortable being in that appropriate headspace to get on with the rest of your day, you were in the middle of facilitating a workshop, having just received this news, and then what happened?Brandt Comfortable is the wrong word. I dealt with it, I put it in a drawer and I said okay I am going to have to deal with that later, got home, got my primary physician to refer us to a head and neck specialist who referred us to Yale and Sloan Kettering and said you should look at both of these facilities, not sure they had a specific doctor, but they referred us

to the two places.Chagpar Which one did you see first?Brandt I saw Sloan Kettering first, but it was just because that is the way the appointments fell. I am really logical, and I believe in The Stockdale Paradox, which is when you get bad news, you deal with it as it is you recognized the brutal facts about it. Cancer is a bad thing, and so I was not trying to color it. I was trying to make it see many better than it was. This is a bad thing, this was a problem to deal with, so that is the first part of The Stockdale Paradox. The second one is you then go forward with immense optimism. So, I was going to deal with it, I was going to get all the information I could, all at the same time. I considered going back to MD Anderson because I have done a lot of work with them in Houston and they are supposed to be wonderful, but I said okay, let us deal with the local ones, and at that time I though Sloan Kettering is pretty good. And so, actually we saw the heads of both departments. Chappar And so, is it important, do you advise patients to get second opinion?Yarbrough I think that really depends on where they go and their comfort level with what they have heard. But certainly if there are concerns or if they think that they would like to hear a second opinion to validate what they have heard, we certainly encourage that, but I think George made a great point and his doctor gave him good advice. There is a lot of data now saying that going to a place that is used to treating head and neck cancer, has the appropriate team to treat the head and neck cancers, and basically has all facilities and all ancillary personnel needed for treating head and neck cancer is very important, not only does it relate to function after you are treated, but cure rate is actually effected by going to a place where the radiation oncologist wakes up in the morning thinking about head and neck cancer, where the surgeon wakes up in the morning thinking about head and neck cancer, and where the medical oncologist wakes up in the morning thinking about head and neck cancer. So, going to the place that has these teams in place is very important. It is not just going to one doc and him telling you "oh! here is what I think." They may say that to begin with, but at our institution 21:52 into mp3 file https://ysm-websites-live-prod.azureedge.net/cancer/2017-YCA-0402-Podcast-Yarbrough 299397 5.mp3certainly, we have a team that meets every week, we discuss new patients and treatment options and we come up with a treatment option that we think gives the best chance for cure, but also we take into consideration long-term problems from the treatment and that is one of the major things right now with our group, is we are trying to deescalate therapy not with the risk increasing recurrence but deescalating therapy because somebody who undergoes chemotherapy, radiation and surgery for these tumors has long-lasting side effects, and in Mr. Brandt's case, his job and his lifestyle would have been affected had we had to undergo intensive multimodality therapy. So, our recommendation was to try a single modality therapy and then based on the pathology we may have had to suggest more modalities, but without doing that first single modality, which was surgery, we would not have known what to recommend and I think he would probably ended up getting two modalities of therapy – chemotherapy and radiation if we had not done surgery upfront. Chappar Mr. Brandt just for our listeners, what is it that you do? When Dr. Yarbrough talks about it would have affected what you do - in your job and your lifestyle.Brandt I am a consultant, I do executive onboarding, I work with senior executives moving into new positions all around the world. So, I do a lot of traveling, a lot of work, a lot of writing. Chappar So, you need your voice, and you need to be up and moving around and being able to interact with people.Brandt Yes.Chagpar And so, the first stop you made after you were given this diagnosis is you went to Memorial Sloan Kettering, a high volume center, multimodality place where people wake up in the morning and they think about head and neck cancer. What did the docs at Memorial say?Brandt There was a choice for an operation, there was a choice for radiation, there was a choice for chemotherapy, and the question was, what was the combination. And the recommendations were different. Memorial Sloan Kettering said, we want to do the operation and we most definitely want to follow that up immediately with radiation and maybe chemotherapy, and Dr. Yarbrough said as he just described, we definitely recommend the operation and then we will see. And I ended up choosing, I anticipate the question, Dr. Yarbrough and Yale New Haven over Memorial Sloan Kettering for three reasons. One was, the course of treatment made more sense. Second one was, I was talking to the heads of the department in both places and the answer to the 25:18 into mp3 file https://ysm-websites-live-prod.azureedge.net/cancer/2017-YCA-0402-Podcast-Yarbrough 299397 5.mp3question of who is going to do the operation was different. Dr. Yarbrough said well that is me. And then the third thing was, a guess, an instinct and looking back on it, it feels like I made the right choice. Chapgar Dell, what was it in the pathology that would have made you go to a second or a third modality. Because it may well be that the surgeon at Memorial looked at your initial pathology and said "Jeez, you know, I think you probably need a second or third," and what was it that would have made you sway in that direction?Yarbrough Yes, that is a great question. And it is always rolling the dice a little bit because we do not know until we do this surgery, and the reason we do not know is because there are certain pathological features once you get the tumor out, once you get the lymph nodes out that the pathologist look at, and if those pathologic features come back one way, it means "okay, you need radiation therapy or you need radiation with chemotherapy. If they come back another way, then it means maybe we can just sit tight and not have to do anything. Those things are little bit technical, but one is positive margins. Obviously, if you do not get all of the tumor out, then you need some additional therapy. Another thing is the number of lymph nodes that are involved by a tumor. More lymph nodes is worse, you need more therapy if you have more lymph nodes involved. And then there is some spread along nerves, spread along vessels and spread outside of lymph nodes, all that can make us recommend more aggressive therapy. But those things are unknown until you actually do the surgery. So, we talk to patients before and we say here are the options, and one of the options is nonsurgical therapy and there are some people who do not want surgery, that is clear, but the nonsurgical therapy usually means radiation or combination

of radiation with chemotherapy, and a lot of people logically go down that pathway and say it is nice to know exactly what I need from my tumor. And this is one way we personalize therapy for our patients by knowing what they need. So, we only go as far as they need to be treated, we do not start off with a sledgehammer if they only need a hammer.Brandt Can I jump on this. The difference is the word "if." And what you were doing with me was keeping options open. Chagpar And so, in our last 30 seconds the only other thing that I wanted to ask you Dell, because I think it is a really important issue is that you had mentioned that a lot of cancers are caused by HPV in the head and neck. Is this something that is preventable with vaccinations?28:25 into mp3 file https://ysm-websites-live-prod.azureedge.net/cancer/2017-YCA-0402-Podcast-Yarbrough_299397_5.mp3Yarbrough Thank you so much for asking that because we do strongly recommend that both boys and girls be Boys are susceptible to head and neck cancer caused by HPV, vaccinated. and of course, girls, women, are susceptible to uterine and cervical cancer but also head and neck cancers. There is a vaccine, it is recommended for boys and girls age 9-21 or 26 depending on gender, and we do recommend that all patients can be vaccinated.Dr. Wendell Yarbrough is Professor of Surgery in Otolaryngology and of Pathology and Section Chief in Otolaryngology at Yale School of Medicine. And George Brandt is a cancer survivor. If you have questions, the address is canceranswers@yale.edu and past editions of the program are available in audio and written form at YaleCancerCenter.org. I am Bruce Barber reminding you to tune in each week to learn more about the fight against cancer. You are on WNPR, Connecticut's public media source for news and ideas.