

Advances in the Treatment of Thyroid and Parathyroid Tumors

Webcast

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Introduction

Andrew Schorr:

Hello and thank you for joining us. Once again, I'm Andrew Schorr broadcasting live from Seattle. Our voice is going around the world. We have a leading medical expert from Houston. We have an inspiring patient from Houston. And hopefully we have you calling in, if you like, as we talk about advances in the treatment of thyroid and parathyroid tumors, malignancies but also nonmalignancies too.

I'd like you to meet someone, a mom who's going back to work to be executive director of a counseling center who really just less than a year ago went to her doctor and found out that she was diagnosed with cancer, a thyroid cancer. There was a lump there, you know, on her neck, and get it biopsied and it was a cancer. Well, any cancer diagnosis can be terrifying, and when you talk about endocrine cancers, there's thyroid, we'll hear about other kinds of tumors as well, the adrenal glands, parathyroid. We'll hear about nonmalignancies as well, but it's certainly scary.

Well, fortunately at the M. D. Anderson Cancer Center they have a whole endocrine center, and we're going to hear as we go on about a whole multidisciplinary team that's totally devoted to helping people with these conditions. And the overriding message, wherever you may be listening in the world, is get to a place that specializes in this. If you have these symptoms that you'll hear about today and you've been going doctor to doctor or maybe there's a genetic syndrome in your family, you want to get to a place like M. D. Anderson and the endocrine center because that's what they specialize in. And there are clinical trials as they make advances in this. Well, that's the lesson that Ana Schick learned.

Ana, so you live in Houston?

Ana:

Yes.

Diagnosing Thyroid Conditions

Andrew Schorr:

You had a thyroid condition that was being followed, right?

Ana:

That's correct

Andrew Schorr:

And so you had had a biopsy, but it was negative, and then last year in 2007 something was felt and you had another biopsy and then it turns out to be cancer.

Ana:

That's right.

Andrew Schorr:

Must have been scary.

Ana:

Well, it was. And just to clarify on my story the first biopsy I had was not through M. D. Anderson and it was negative for one side and inconclusive. And one of the lessons I have learned since then is I should have followed up on that at the time and gone to somewhere that does biopsies like this all the time and gotten a conclusive answer at the time.

Andrew Schorr:

One of the things that I've been discussing a lot as I do more and more of these programs is the art of medicine. So it's not just who has this machine or this or that plaque on the wall but really who knows all the nuances of these conditions and says, you know, this is rare but I've seen that before, or in this condition we need to investigate further. Certainly for you, though, as happenstance it turns out you knew the physician we're going to meet in a minute who's a specialist in this, and that made a big difference in getting you to M. D. Anderson and apparently you got excellent care.

Ana:

I did. I did. I felt like the minute I got the diagnosis I knew where to go and who to call. And I spoke with my doctor who told me how many operations she does a year on the thyroid and parathyroid and how the people within her group solely concentrate on this type of cancer, and to me that was just very important and I felt like I would get and did get the best possible care that I could.

Andrew Schorr:

You so you had the biopsy, the whole diagnostic work-up. You had surgery, and then you had very brief radiation to kind of get rid of the thyroid. We'll learn more about all the treatments. Now you're taking a medication, but you've gone on with your life.

Ana:

I have. I was telling someone not it too long ago, I had my surgery in June and my treatment in July and it is almost, not quite because I have to go for follow-up, but it is almost like it never happened and it is a blessing to be able to say that I think.

Andrew Schorr:

Well, one of our producers, actually, was diagnosed with thyroid cancer at age 20 and we had another producer as well, same thing in college. And I'm happy to report they both had similar treatment to you, surgery and radiation, and while they do take a medication to give them the hormones they need now that they don't have the thyroid gland they're doing well. So I know there needs to be follow up. Will you have PET scans or other follow-up exams periodically just to keep track of things?

Ana:

I will. I'll have ultrasounds, chest x-rays, blood work on a regular basis. And I think for the first five years they follow you very closely. I think every three to six months I will be seeing my endocrinologist at M. D. Anderson, and then after the five years I believe it becomes every year.

Andrew Schorr:

Well, I'm glad you've gotten such great care.

Ana:

Thank you.

Andrew Schorr:

And there you are. Some people come from thousands of miles away, like I did, to M. D. Anderson. You went sort of down the street.

Ana:

I did.

Andrew Schorr:

I'm glad you made the right choice and it went well.

Ana:

And I've met several people who had come from Europe, from all over the world to be at this world-renowned center.

Common Thyroid Problems

Andrew Schorr:

Let's meet your doctor. So you know her by living in Houston as well, have mutual friends, and you've gotten to know her too, but it turned out to be just the right

person to be part of your team. Dr. Nancy Perrier is a surgeon, but she's an endocrine surgeon, and she has a lot of training in specializing in these particular types of malignancies and other tumors.

Dr. Perrier is also the associate medical director of the endocrine center, and she's coordinator of medical student surgical education also at M. D. Anderson.

Dr. Perrier, thank you so much for joining us. Help us understand how common these conditions are. And I know we're not just talking about cancer of the thyroid or even nonmalignancies of the thyroid. We're talking about some other areas that fall into this endocrine area too. Give us a little orientation, if you will.

Dr. Perrier:

Thank you. Thanks for having us on tonight. Our specialty in the endocrine, the multidisciplinary endocrine center is to treat tumors both benign and malignant of the endocrine system. And the endocrine system is the system within all of us that controls the hormonal production and in particular the tumors that we treat in the center are those of the thyroid and the parathyroid, the two hormone-producing glands in the neck, the adrenal glands, which are the hormone-producing glands in the abdomen, and other carcinoid or other neuroendocrine tumors of the gut.

There are other endocrine tumors within the body, but they are not specifically treated within our center, but they are virtually associated through other centers, for instance, pituitary lesions that are a part of our brain center. In particular our expertise in training is in the thyroid, parathyroid, adrenal glands, and we see tumors like Ana's that are part of the thyroid, which is probably the most well known of the endocrine tumors in the endocrine system, but we also see tumors of the other glands and the majority of them do indeed require surgical treatment. And it makes up the bulk and in fact the entirety of the practice that I hold, which is surgical removal of these tumors, which is foremost treatment for the majority of endocrine problems, particularly the malignancies.

As in Ana's case, she had a tumor of the thyroid gland, which falls in the realm of probably about 25 or 30 thousand people this year will be diagnosed with thyroid cancer. And of those the majority of them do occur in women, and younger women that have the disease certainly do much better than older women or than men that have the disease. And as Ana has said the disease treated properly and treated with standard regimens and protocols usually results in a long-term cure, although patients, as she eloquently stated earlier, do need to be followed rather closely. But with proper treatment the statistics are that she should go on to live a normal, healthy life with the exception of needing thyroid pills because her thyroid has been removed, her thyroid replacement therapy.

There will only be probably 2,000 people who will die this year of thyroid cancer, and those are people who usually had more aggressive types of tumors, people who

may be diagnosed at an older age, perhaps men, but the number of people who survive with these tumors is certainly much greater than those that die. But the problem with the disease is that it never really goes away, and people need to be followed for lifetime with regimens such as discussed with ultrasound and with blood tests to be certain that the disease doesn't come back. If it comes back it doesn't necessarily mean that it's fatal, but it means that there's another round of treatment. There might be more operations. There might be more radioactive iodine in the future for that patient, which obviously can create problems with quality of life.

Andrew Schorr:

I want to back up for a second because I'm willing to bet that there are people with vague symptoms or symptoms that could be confused with something else, and they go from doctor to doctor before they ever get to M. D. Anderson and you see people who maybe went for quite some time with an undiagnosed endocrine tumor or malignancy. Am I right about that?

Dr. Perrier:

You are right. We do see a lot of people that have had a delay in diagnosis. Not necessarily so long in the delay with thyroid but particularly common in people with parathyroid or adrenal problems. With thyroid problems, the majority of thyroid cancers usually present with thyroid masses. And the patient may notice problems with a cough, they may notice a problem with a new onset of hoarseness, they may notice a problem with difficulty swallowing or difficulty breathing, but usually there is a thyroid mass that is noted.

The correct work-up for a thyroid mass is a biopsy. We usually refer to those as fine needle aspirations. The medical lingo for that is FNA, and that's a very precise and sensitive measure that samples a thyroid nodule. But the catch is that it has to be done by someone who's experienced, who knows how to do it well, who biopsies the right and most worrisome portion of the lesion to get an accurate diagnosis. And then once the diagnosis is made then the steps to proceeding with treatment are quite common.

So my advice to the general public with thyroid problems are again if you're concerned about a thyroid malignancy it's the nodular thyroid disease, it's the nodules in the thyroid that carry a certain characteristic that make us more suspicious of malignancy. For instance a very experienced ultrasonographer can perform an ultrasound and usually with relative ease be able to differentiate nodules that appear routine and regular and bland and benign from those that appear unusual, unusually aggressive, characteristics concerning for malignancy, and it's in the hands of that good ultrasonographer that a fine needle aspiration is performed on the worrisome lesion and not on any of the other less worrisome lesions.

And with that algorithm patients are usually targeted in a relatively straight fashion. But they need a good physical examination. They need a doctor who's going to take a good history, looking for the signs and symptoms that would be suspicious of malignancy, and they need a good biopsy, a good FNA, and with that a good pathologist to interpret the biopsy and to interpret the cells appropriately and make sure that there are enough cells and that the diagnosis is definitive. And that is the advice that we give both, to put yourself in a setting where all of that is going to be done with relative ease and confidence.

For the other endocrine tumors, again the diagnosis can be much longer because the symptoms are much less obvious and are more subtle.

Symptoms of Thyroid or Parathyroid Tumors

Andrew Schorr:

Before we take a quick break, give us an example. Take parathyroid or adrenal. What could some of the symptoms be?

Dr. Perrier:

For a patient with parathyroid tumors, those are-the parathyroid glands are the glands that live right behind the thyroid gland, and they are very small. They usually are about the size of kernel of corn. They completely control the body's calcium level. And if a patient has symptoms such as kidney stones or pancreatitis, those are usually results of high calcium in the blood. A blood test by the primary care doctor who is suspicious of these symptoms or suspicious because a patient may have thin bones, which we refer to as osteoporosis, and that would indicate that the thin bones, that the calcium is going somewhere such as in the blood, and if you do a blood test and your doctor notices that your blood tests revealed a high level of calcium in the blood, that would warrant further evaluation for a tumor on the parathyroid gland.

But it really takes a good clinician to listen to the patient, to get a history that would be compatible with kidney stones or with osteoporosis or generalized fatigue and lethargy and low energy, which are some of the consequences of having high calcium. And likewise with adrenal lesions. Adrenal tumors commonly make hormones that produce abnormal hormone sequelae in the body. The patient may have excess hair growth or weight gain that's out of the ordinary or increased areas of stretch marks that are in nine classic areas. They may be women who have stopped menstruating without any other cause. And those are symptoms or signs that would be suggestive of hormonal overproduction which would warrant a good battery of biochemical tests which would render the diagnosis of hormone overproduction and then prompt further work-up for an adrenal cause.

Andrew Schorr:

Wow. Well, I can imagine you are quite the detective with your team there when somebody may have these unusual symptoms and then come finally to see you and then you look and do what you can and you say, Aha, and you can explain it with these endocrine evaluations.

We'll be back with much more as we continue our webcast in discussing the advances and treatment of thyroid and parathyroid tumors. We're visiting with an expert, as you heard, Dr. Nancy Perrier, who is associate professor of surgery. She's an endocrine surgeon. She's associate medical director of the endocrine center at M. D. Anderson Cancer Center in Houston. And also we have with us her patient Ana Schick, who has been treated great and is doing well and is looking forward to a long life.

The Importance of Being a Knowledgeable Patient

Andrew Schorr:

Welcome back to our live webcast, Patient Power on mdanderson.org. Our programs go far and wide, live around the world. So tonight we're discussing thyroid cancer, nonmalignant nodules as well, parathyroid, adrenal, the whole ball of wax related to the endocrine system. But if you look at our library on mdanderson.org you'll see that we have been interviewing some of the foremost cancer experts in the world, and it's just an unmatched library of content. I'm so thrilled with the people I meet as I do these programs. And it's not just the doctors, but it's the inspiring patients, and Ana Schick joins us today.

Ana, so you did a lot of research as well. You did not just, you know, go to Dr. Perrier, you know. You knew her and you knew people who knew her, and that was a good choice, but you were also getting smart about thyroid cancer yourself. And you'd agree that's important to be a knowledgeable patient, wouldn't you?

Ana:

I do. I think it makes it less scary. I think you're better prepared for what you face, and I think there's a lot of information out there on the internet, in books and through other doctors.

Andrew Schorr:

Now, you have kids, and you're social and now you're involved in a counseling agency. You're meeting a lot of people. You know, people can tend to whisper, oh, she has cancer. How did you educate people about thyroid cancer and say, you know, it's rarely fatal. I've got through treatment. Yes, I had surgery, and I think I got good care, and I'm going to go on with my life, and I believe I'm going to be okay with follow-up exams as we discussed. Because people hear the word "cancer," and they just roll it all into one and think, you know, that's the end of you, and it isn't. Is wasn't for me other. What do you tell them?

Ana:

Well, I think that's true. It's a scary word to anyone, and you put it into the perspective usually of people you know and sometimes that is someone who has died of cancer. So for me the first thing was to assure my kids and assure the people around them that I was under great care, had been informed by my surgeon and my doctors that the rate of survival and the cure rate was incredibly high and that our attitude would continue to be positive based on what we knew and based on being in an, again, a world-renowned center specializing in cancer treatment and in my case in the treatment and surgery of endocrine cancer.

Andrew Schorr:

Well, that's the way it worked out for me, is go, folks, to where they specialize. So in my leukemia, chronic lymphocytic leukemia, turns out M. D. Anderson has the world's largest leukemia clinic and has several physicians who only specialize in the type of leukemia I have. So I got there, and I was in a clinical trial, and the treatment that I had almost eight years ago now is what most people have worldwide. But I had it eight years ago and happily remain in very, very deep remission.

Ana:

Congratulations.

Clinical Trials at M. D. Anderson

Andrew Schorr:

I wanted to ask about that of your doctor, Dr. Perrier. So M. D. Anderson is also a research institution. So you have all these really smart people in endocrine conditions and cancers together and you continue to do research. So do you have a lot of trials going on? And particularly in some of these other areas that are less understood, the parathyroid tumors, the adrenal tumors that maybe the doctors around the country are less familiar with or they're harder to detect, I imagine there's a lot of research going on that you're doing at M. D. Anderson.

Dr. Perrier:

We do. We do have clinical trials, and that is part of the commitment of the institution. We are not only responsible and are dedicated to taking care of our clinical patients but moving these diseases forward is what most of us here are about. We have the privilege of treating many patients like Ana, and with that comes the responsibility of seeing this high volume, of understanding it, of learning about it, of looking at trends, looking at patterns so that we can then give back and disseminate that information to the rest of the medical community around the world. So it is a complete give and take. It is the multiple patients that we see that bless us with having this information that we can then decipher and disseminate back.

Part of our care is clinical. Part of our care is education and training the next generation of surgical oncologists, of medical oncologists, of good doctors to provide good care. And also the next generation of research, which is what this place thrives on, but finding answers to not just cure the individual, which we are committed to doing, but the disease itself in gross volume.

For instance in thyroid cancer I'm privileged to work with some great colleagues. We actually recruit patients for clinical trials. Steve Sherman is the head of the endocrine department here. Camilio Jimenez, Mimi Hu, Naifa Busaidy, a whole great group of endocrinologists, Bob Gagel, leading clinical trials. There are eight ongoing clinical trials right now for patients with thyroid cancers like Ana's, like papillary, like the well differentiated, and also some of more unusual thyroid cancers like the medullary.

We are anticipating opening up two new trials this summer which are looking at certain aspects of the diseases that are not routine. For instance patients that have tumors that aren't usual and don't respond to the normal management regimen such as radioactive iodine. Having trials that look at treating metastatic disease with new isotopes and new chemotherapy agents, and that is what we're all about. But again as I say that I always reinforce it's the privilege of seeing great patients that allow us the opportunity to take the next step to better understand these diseases. As anything there's a pattern. We understand why certain patients have recurrences, why others are resistant to the standard regimen, and through those masses of individuals things pop up. We're able to recognize patterns that we would not be able to recognize if we didn't have such a high volume of patients that come through.

Genetics and Thyroid Cancer

Andrew Schorr:

Right. I have a couple of questions for you. 80 percent of the time when we talk about thyroid cancers they're not inherited, but yet when we talk about the medullary thyroid cancer it can run in families. So is some of your research looking at some of the genetics, and if so what does that mean what one family member is diagnosed? Should other people be tested?

Dr. Perrier:

It absolutely does. And your right, to put all of this into perspective, for instance thyroid cancer is now the eighth most common diagnosed malignancy in women, and it is actually on the rise. It's on a faster rise than any other type of cancer, and it's increasing. So we are seeing more and more thyroid cancer. Of those, 80 percent of them are of the differentiated type that include papillary and follicular. And we understand those patients. It doesn't mean that they're home free, but we understand those tumors better than we do some of the more unusual kind.

Medullary is one of the least common types. It only comprises four percent of all of thyroid cancers, but it is the kind that in the majority of cases, and more so than any other thyroid tumor, it has a familial component. So if a patient has a preoperative diagnosis of medullary thyroid cancer it makes us suspicious that it's a familial component which means it's a genetic mutation. We can then do a blood test on the patient looking for the specific gene that we know causes that cancer, that certain genes of that type also cause other tumors of the endocrine system, which are very important for us to find before the first operation happens. For instance patients may also have tumors of the adrenal gland, which would be very important to identify preoperatively to prevent any intraoperative problem and to prevent unnecessary surgeries.

On the same vein, if a patient has medullary thyroid carcinoma and we find that they are a carrier of the genetic mutation, that means that their offspring have a 50 percent chance, each one of the offspring of that patient with that mutation, for instance, of the RET gene has a 50 percent chance of developing that cancer. That becomes very important for patients who have children for instance, because if we can diagnose that genetic mutation prior to the presentation of the cancer we can do something called a prophylactic operation. For instance we could remove the thyroid gland before it ever turns into a cancerous gland, and we can prevent the cancer from occurring. It's very important. It's very powerful, and again all of that is available because of the genetic testing, the genetic research, the genetic trials that we have available. These are available commercially across the country, but to be treated somewhere where your physician understands this and understands the ramifications of early detection and understands the genetics can have powerful influences on the next generation of actually eradicating the disease.

Andrew Schorr:

Well, I was just looking through your bio, Dr. Perrier, and I think I have about four pages of articles that you've been one of the authors of, so clearly you and I'm sure it's similar with some of the other team members there, this is what you do. So my message to people as particularly you can imagine if this pops up that maybe this could be what's in your family, this medullary thyroid cancer, where do they study it? Where do they study it? Where do they learn about the genetics? Well, it happens to be M. D. Anderson is one of the leading places. So I urge you not just to listen to our webcasts but get on the plane, get on the bus, take a taxi, have somebody drive you, go over to the endocrine center at M. D. Anderson. Ana was pretty close, but wherever you come from I think the specialized care makes a difference.

We're going to take another break and after we do we invite your e-mail comments and questions. Just send us an e-mail to patientpower@mdanderson.org or give us a call. 877-711-5611. Now, we've gotten several e-mails. Remember, we can't practice medicine over the internet but we'll try to take the sense of your question

and see how it applies to you and to other people and what sort of the theme of the question is and do our best in giving you some guidance. We'll be right back with more of our live webcast on Patient Power sponsored by M. D. Anderson Cancer Center.

Hypothyroidism and Hyperthyroidism

Andrew Schorr:

Welcome back to our live webcast as we're discussing advances in the treatment of malignancies of the endocrine system and some nonmalignant tumors as well, thyroid, parathyroid, adrenal glands. We'll learn more about the latest treatments as we go on.

One of the things that I wonder about because I've done programs with a number of women and endocrinologists where we're talking about hypothyroidism or hyperthyroidism, and I know people develop the fatigue and other symptoms that go with it, sometimes they can't get out of bed, and it turns out they have malfunctions in their thyroid. But I wondered is there a connection between this and cancer. So let's ask our expert, Dr. Nancy Perrier.

Any connection between just thyroid conditions in general?

Dr. Perrier:

That's a great question because many patients ask that and come to see us because of that. In general, however, most patients who have thyroid cancer actually a normally functioning thyroid gland. The thyroid gland is a small butterfly shaped gland that sits in the neck right above the collar bone, and it sits right in the central portion, and it's probably the size of a generous butterfly, and it's somewhat shaped like a butterfly. Thyroid cancers are nodules--usually originate in nodules that start in the thyroid gland. They regenerate abnormal cells and become cancerous, but the remainder of the gland usually functions normally.

So having a low thyroid hormone level, which is referred to as hypothyroidism, which many patients may recognize as feeling very tired and worn down, or having an overproductive thyroid gland, which is referred to as hyperthyroidism, which makes patients feel nervous and jittery and agitated, those are usually not associated with the cancers. The cancers grow quietly in these nodules and may grow in other areas, but they don't make hyper- or hypothyroidism. They can however grow and make other symptoms, create other symptoms such as hoarseness if they happen to grow into the voice nerve, which lives right behind the thyroid gland, or difficulty swallowing if they grow and push on the swallowing tube, which is the esophagus, which is right behind the thyroid gland.

Andrew Schorr:

Right. However, after you do the typical treatment, let's say, for thyroid cancer which would be surgical removal of the thyroid and as I understand it then brief period of radioactive iodine to get rid of all the cells, then you don't have a thyroid gland so you need to take often the same medicine that somebody would take if they had a thyroid condition. That is right?

Dr. Perrier:

That's correct. So thyroid hormone is a necessary hormone for human survival. In other words it serves somewhat as the gas tank, and patients and individuals cannot live without thyroid hormone. There are two conditions where a patient would need thyroid hormone supplementation or replacement. It might be the thyroid gland was surgically removed, either because it was cancerous or because it had become abnormally enlarged, which we refer to as a goiter, and causing compressive symptoms to the patient where they had difficulty swallowing and breathing, and the thyroid gland was removed. That patients would then be committed to taking a pill every day for the remainder of their lives to supplement and replace the thyroid hormone that's no longer being internally produced.

Another reason to take thyroid hormone, however, Andrew, would be if a patient had a thyroid gland that was still in place but was not working normally. For instance, the patient would have the diagnosis of hypothyroidism. The thyroid gland was underproductive, not making enough thyroid hormone. That patient may need to be treated with thyroid hormone pills, which are the same exact pills that a patient would take if they had no thyroid gland at all. That is often confusing to patients about why they are taking the thyroid hormone, but the gestalt is that indeed you need it whether your body makes it or whether you take it exogenously through a pill, and there's a certain level that you need.

For instance if you're committed to taking pills because your thyroid has been removed, such as Ana's, it can be a blood test that can be obtained that confirms to the physician that indeed you're on the correct amount of thyroid hormone. It's a very meticulously regulated gland that's also controlled by the brain and lets us know when we are not giving a patient enough or when we are giving the patient too much.

Nonmalignant Tumors

Andrew Schorr:

Now, we mentioned that there can be malignant growths, but there can also be nonmalignant. So just if somebody feels something or something shows up on some sort of ultrasound do we immediately say, Oh, my god it's cancer? And if it's not a cancerous growth, if it's not a malignancy, do you need to take everything out or can you just take out those abnormal cells and be done with it?

Dr. Perrier:

Thyroid nodules and actually quite common, and they may be the same as patients who have fibrocystic breast disease and have breast cysts or multicystic ovarian disease. They're often referred to as just even wrinkles on the thyroid gland. But nodular thyroid disease is not uncommon. But when a patient has thyroid nodules it's taking it into context. As you said at the beginning of this program, it's the art of taking it into context, doing a very thorough physical examination, obtaining a history from the patient, making sure there's no family history of thyroid carcinoma, making sure the patient has not had prior radiation exposure which would put them at a higher risk for thyroid cancer. It's going through that algorithm and doing due diligence to try and understand whether or not this individual patient is actually at a higher risk than the average population and then putting together some diagnostic tests that would be more informative.

Having a very well performed ultrasound is very informative, whether or not the nodules are usual looking, whether or not they malignant appearing, whether they have the characteristics, whether they're multiple nodules or solitary nodules, taking that into consideration. Having a good fine needle aspiration and understanding and coordinating the pathology report with what is seen on the ultrasound report which is, what is being felt on the physical examination, which is what is what's also corroborating with what is in the history of the patient, and it's the art of putting all of that together that really is what is necessary.

Benign thyroid nodules do not need to be removed unless they're causing a problem. They can remain intact, but a follow-up of making sure that they're not changing or at least reexamination of the patient in six or 12 months is usually what is recommended. So as Ana stated earlier in the broadcast, following up, knowing what is routine and what is expected, that just comes from being self-educated and taking responsibility for your own healthcare and not letting your health fall through the system. And being diligent, doing due diligence. Having that repeat examination. Making sure you put yourself in the hands of a doctor who's comfortable with this disease.

And that's what it's all about. And that I think, Andrew, is what you're getting to when you're referring to Anderson. We've got so many people here who do this regularly, whether it's the genetic counselor who only sees patients with familial thyroid cancer, whether it's the great radiologist who only does ultrasounds of the thyroid day in and day out, whether it's a fantastic pathologist who really doesn't look at anything but thyroid FNAs all day long, whether it's a great endocrinologist who knows absolutely what's on the forefront for cancer trials. But it's just getting yourself in the hands of someone who's familiar and comfortable and who does this type of disease regularly. There are many good doctors out there, but finding a good doctor who is good at the disease that you have is what we encourage all patients to look for.

Scars from Surgery

Andrew Schorr:

Right. I think across any illness. Now, Ana, I don't know if you worried about this, but when I think about something on my neck or, you know, start getting close to my face and then you mentioned the word "surgery," definitely I want to beat the cancer or if they're nonmalignant, get these nodules out, have them not be a problem, but I also don't want to be disfigured in any way. Ana, did you worry about that at all, that there would be some kind of unsightly scar? I mean, definitely you wanted the cancer treatment.

Ana:

Yes, and I did, and that was one of the first things that Dr. Perrier addressed with me to alleviate my concerns immediately. She made it clear to me what size of an incision she would attempt to make, what the scar would be like afterwards, how long the scar, which of course is still there and shrinking, would be there and what to expect when I first left the hospital after surgery. So of course removing the cancer was my primary concern, but, yes, since it is such a visible area I was anxious to have that information as well.

Andrew Schorr:

In part of your team are there actually people who are plastic surgeons? Does that come into play at all as their surgical approaches to this, Doctor?

Dr. Perrier:

For thyroid surgery, no. Most of us that do thyroid surgery are well trained general surgeons who have had five, six, seven years of general surgical training, which plastic surgery is part of our training. The incisions are usually rather small. The incision may be two to three centimeters in length in the central portion of the neck. But the closures that we perform, which is what the esthetic part of the operation is about, is usually with stitches that are buried underneath the skin. They usually dissolve well. We don't use clips or anything that would cause unusual scarring. And usually it's fairly routine for those of us who do this for a career. So no, there's no plastic surgery involvement for this particular operation.

But as Ana stated it is a reality, and patients ask about it, and they're concerned about it. We do always practice under the principles of good oncologic surgery, and our primary goal is to remove the cancer, and it's not purely esthetic. However, because our patients enjoy a long survival, many of them are female, two-to-one female to male ratio, and the neck is an important part the body that's visible, we're always very cognizant of giving them the best plastic surgical procedure that we're capable of doing in perspective, for this is an oncologic procedure.

There are endoscopic modes to removing the thyroid through smaller incisions, one centimeter incisions with additional small, trocar sites out laterally, which are less

obvious to the eye when viewing a patient's neck. For instance the secondary incisions may be lateral, near the musculature on the lateral side of the neck, and that's all possible. And we have those capabilities and when necessary we use that approach. We have colleagues here who exclusively are using that modality more and more. We, however, are not in the common phase of doing it for cancer operation at this time. For patients with benign thyroid disease that needs to be removed for other instances, we are much more enthusiastic about these approaches, but we are a little more reluctant when it comes to oncologic procedures.

Andrew Schorr:

Okay. Good information. We're going to take another quick break. We'll be back with a final segment of our live webcast as we discuss advances in the treatment of thyroid cancer, nonmalignancies too, parathyroid, adrenal. And also what I've been doing is I've been asking questions that several of you have been asking along the way. I want to understand a little more about radiation as well and then follow up for people and whether there are other things that they can do, diet, etc. It's all coming up as we continue our live webcast. Patient Power sponsored by M. D. Anderson Cancer Center.

Life After Thyroidectomy

Andrew Schorr:

Welcome back as we continue our discussion about thyroid cancer, endocrine cancers and nonmalignancies as well. Our guest is Dr. Nancy Perrier, she's associate professor of surgery, associate medical director of the endocrine center at M. D. Anderson. And also her patient Ana Schick, who was treated over the last year had surgery, had very brief period of radiation for thyroid cancer. She's doing great. All of us, myself our doctor and our patient, we all got kids we've kept at bay today so we could do this live webcast. Just sort of stay away from them so we can do this for you. Please tell your friends and family if this applies, the replay, the transcript will be there for you on the M. D. Anderson website, as all our program are, and then we have a program every two weeks.

Dr. Perrier, so let's go further. So somebody may have surgery and then follow up, as we are talking about with Ana. Is there--and they'll take medicine for the rest of their life. Now, there are a number of different medicines. Can normally side effects be avoided or if there is a concern about side effects can you change medication? And then the other thing I want to ask you about is does diet come into play at all too? Do you have it be on any kind of special diet if your thyroid has been removed, for example?

Dr. Perrier:

The mainstay for thyroid cancer is thyroidectomy, which is removal of the thyroid, and the adjuvant treatment following that may be necessary if the patient is

presumed to be at a high risk for recurrence. And that adjuvant treatment for most standard cases begins with radioactive iodine. And what that is is it's giving the patient an iodine molecule that has radiation attached to it because the thyroid cells in the body are the only cells in the body that specifically have uptake of iodine. And so if the thyroid is removed but there are other microscopic cells that are left residing in the neck, in the lymph nodes, in the lungs or anywhere else in the body where the cancer may have spread, by giving the patient the radiated iodine, which is an oral, form those thyroid cells can then be somewhat poisoned so that they don't recur and grow and develop metastatic disease. And that's the major thought behind the role of radioactive iodine.

So after the thyroid is removed the patient needs to be made hypothyroid in a state such that when that radioactive iodine is given to the patient in an oral form those microscopic cells that are left residing in the neck, in the thyroid bed or in the lymph nodes or anywhere in the region or the body will be very susceptible to taking up that iodine. So in that immediate postoperative period if the decision is made by the endocrine specialist and the endocrine surgeons and the patient to give the patient radioactive iodine, the patient needs to be on an iodine-free diet so that their body is somewhat starving for iodine so when that radiated iodine is given four to six weeks later the susceptibility of those cells is at its highest point.

Once the radioactive iodine is given, the patient is then placed on regular routine thyroid hormone replacement therapy such as a common drug would be Synthroid or Cytomel. Those are two common pharmacologic names that are associated with thyroid hormone replacement. And from there on the patient basically can live a normal life with a normal diet with relative little influence on the thyroid hormone replacement therapy. There are certain nuances of taking that pill long term. For instance, it's recommended that patients take it during the same time of each day, for instance when they wake up, maybe before breakfast so that it's easily absorbed in the gastric antrum without having any other calcium supplementation, any other medications or any other food on board.

So there are certain small caveats that we recommend for patients, and we have them discuss that with our endocrine specialist or with our pharmacologist or with our nutritionist as needed.

Andrew Schorr:

Okay. That's very complete. Well, this is the kind of expertise we get with your center there, the endocrine center, and I'm just bowled over by the information you shared today. And I didn't know much about thyroid cancer, and I certainly didn't know anything about parathyroid or adrenal or even the thought that sometimes, rare cases, but it can run in families. So it seems like you want to beat a path to the door of M. D. Anderson if this applies to you.

Ana, you did that, and I know you're glad you did. What would you say to people listening if they find that they may be diagnosed with one of these endocrine cancers or even a nonmalignancy and they're just not sure what to do?

Ana:

I think the first thing I would say is just go to the expert. Go to somewhere like M. D. Anderson where you can be confident that they are dealing with what you have all the time. It's much less scary when someone has seen it over and over and over again and can assure you that they've treated it that, they've successfully seen people live with it or without it, and it just gives you such a better feeling to know that it is much more ordinary to that person when it's extraordinary to you to hear the news.

Andrew Schorr:

Well, I wish you well. Thank you for your eloquence tonight and also, let's see. You've got two boys. What is it, nine and 11?

Ana:

Nine and 12, yes.

Andrew Schorr:

Nine and 12, so we've got to give them an award for giving mom some time to talk about this on our worldwide broadcast. Thank them. Give them an Andrew Schorr Patient Power M. D. Anderson certificate, and I guess the best news though is they're probably going to have mom around for a long, long time.

Ana:

That's right.

The Value of a Positive Attitude

Andrew Schorr:

And you can put this thyroid cancer diagnosis behind you but obviously be vigilant.

And so, Dr. Perrier, it sounds like when we look at this altogether though, not to trivialize it at all, these are serious diagnoses, people need to consult with specialists like yourself, but it sounds like in the vast majority of cases people can receive very refined treatment for them and do very, very well. It's kind of a happy cancer story most of the time.

Dr. Perrier:

Andrew, that is true in this case. Remember, there are people that die of thyroid cancer and there are many people who have recurrences which affect their quality of life, but I really cannot reiterate enough how fortunate we are to have patients such as Ana out there. She's a role model. She's been positive through the whole

process. I think she's inspiring to patients with not only thyroid cancer or endocrine tumors but all tumors.

And just having a positive attitude in that half of the power of beating this is the power of the mind. And Ana truly has been a role model through this. She was diligent. She was educated. She did her own research. She asked the right questions. She came to appointments prepared. She was calm, cool and collected and confident with her family, with her friends, with the community. And I think that just her overall disposition is inspiring to not only patients with cancer but patients with illnesses and for all of us and just the right way to be in life.

And perhaps most importantly to reiterate from being on this side of the desk and from understanding it is Ana has the gift of being patient which is very important for someone who is a patient. I think where a lot of people make mistakes is they come up with a diagnosis or they're told that they possibly have cancer or that they have cancer, and they panic. And they want to be treated immediately, and they want to just get in the first place to be seen, and I think that they don't do diligence and they don't do their homework, and the first is not always the best.

For instance at Anderson we see people from all over the world and rarely can we coordinate a visit to have the right ultrasound, the right pathology, the right appointments, the right lab test, rarely can we get that done within a week or two. We strive to get it done. We do the best that we can, but it's important that it's done properly by the right people and that it's coordinated to make it efficient for patients. And what happens is patients call for an appointment, they find out that they can't be seen for two or three weeks, and they panic, and then they go--they start hyperventilating and coming up with solutions that are second in alternative, and they're not patient.

And it's one of those most important times in life when you need to take a deep breath, practice deep breathing, be patient and make the right decision. It may not be the most hasty decision but the right decision is the one to be seen by someone that you're going to be confident that will manage your care so that it can be done efficiently. And that I think is what I see more often than not, is patients who were coming because they haven't been comfortable with the first opinion or the second opinion and they're coming, and it may be that things need to be repeated or redone, and again I caution patients to try to take a deep breath when that diagnosis, as scary as it is, is encountered. Do your due diligence.

And remember Ana. She's calm, cool and collected, and she's done the right thing. And her outcome is going to be positive because it's her mindset that's positive. And I think that we've learned as much from treating Ana as Ana has learned from us, and I think that that is a take-home message for everyone listening to this webcast. Is to not panic, be patient, take a deep breath. And involve someone with your care, whether it's a significant other, a good friend, a family member, but

someone who can help process this information and make it manageable and not become completely overwhelmed by the fearful diagnosis of cancer.

Andrew Schorr:

You're absolutely right. See, Ana, you got another award. Now you've got an award from your doctor too. There you go.

You know, Dr. Perrier, I want to just say that what you just said applies to serious illness really across the board. And I know we've done a number of programs for instance on breast cancer. And so some surgeon says to a woman, well, you're diagnosed on Friday, I happen to have an opening on Wednesday, and as you said, the woman wants it out. Cut the cancer out. Go. It may or may not be the right treatment for her. That you the patient need to take a deep breath, as you said. And usually, and I imagine it's true in these cancers too, the cancer was developing over time, and a day, a week, two weeks, three weeks, maybe even a month is not going to be that critical.

Dr. Perrier:

Right.

Andrew Schorr:

Versus you getting the right care.

Dr. Perrier:

That is so true. And for most of these it's the first treatment is the most important, and if the first treatment is not correct the sequelae of that can be profound. And you want that first operation, you want that first treatment to be the right treatment. You want it to be well thought out. You want it to be properly planned. You want your physician, particularly your surgeon, to have all the information available. There's to be no questions, no rocks that have not been turned over, looking for evidence of metastases, doing all the proper work-up. And that does not always happen overnight. Even at a big institution like Anderson, it just doesn't happen. And it's so common that we see patients who were in a rush and lost that opportunity for the right thing to be done at the right time.

And, Andrew, you're right. These tumors happen over time. For instance, in the endocrine world there are few endocrine tumors that need to be treated immediately. It doesn't mean that the patient needs to procrastinate and not address them for six months, but it means that waiting a week or two weeks or three weeks to have the right treatment is not going to be an error in the big picture and the big scheme of things.

Andrew Schorr:

Right. Thank you so much for saying that so eloquently and giving the benefit of the expertise of you and your team, Dr. Nancy Perrier, associate professor of

surgery and endocrine surgeon, specialist and associate medical director of the endocrine center. Thanks so much for all you do, Nancy. I really appreciate your time today. And Ana Schick, inspiring patient, getting awards and kudos from all of us, thank you for being with us.

Ana:

Thank you so much.

Andrew Schorr:

Oh, thank you. You know, the ones we've talked about are very treatable, and you know one of the most vexing ones is what we're going to discuss two weeks from now, but even there the program on pancreatic cancer is discussing advances. I have a relative where she is living pretty well now and she is almost four years out, and that used to be unheard of. Now, it doesn't always happen. Maybe most of the time it doesn't happen, but there are advances there too, and they happen at a place like M. D. Anderson. So we'll be discussing that in two weeks on Patient Power.

And then there's that whole library of programs for you and your family. And unfortunately cancer touches most families, but there's a lot of expertise waiting for you in the Patient Power section of mdanderson.org.

Thank you so much for joining us. As always, knowledge can be the best medicine of all. You've been listening to Patient Power sponsored by M. D. Anderson Cancer Center. I'm Andrew Schorr. Have a good night.

Please remember the opinions expressed on Patient Power are not necessarily the views of M. D. Anderson Cancer Center, its medical staff or Patient Power. Our discussions are not a substitute for seeking medical advice or care from your own doctor. That's how you'll get care that's most appropriate for you.