EPISODE 53: Spotlight on Surgical Oncology
Dr. Seth J. Concors

Lisa Yen 00:00

Welcome to the Neuroendocrine Cancer Foundation podcast. I'm your host Lisa Yen. I'm the Director of Programs & Outreach, as well as a caregiver and advocate for my husband who is living with neuroendocrine cancer. In each podcast episode, we talk to an expert who answers your top 10 questions. This podcast is for educational purposes only and does not constitute medical advice. Please discuss your questions and concerns with your physician.

Lisa Yen 00:31

Welcome to today's episode of the Neuroendocrine Cancer Foundation Podcast. Today we're joined by Dr Seth Concors, a surgical oncologist at Emory University's Winship Cancer Institute in Atlanta, Georgia, who is dedicated to the care of patients with neuroendocrine cancer. Dr Concors leads Emory's Neuroendocrine Tumor Surgical Program and specializes in complex gastrointestinal neuroendocrine tumors, including advanced and multidisciplinary surgical approaches. And he is also deeply involved in surgical education and research with a focus on outcomes, survivorship and team-based cancer care. A little birdie told me about the multidisciplinary clinic, and I was very interested in this. So, in today's episode, we'll discuss the role of a surgical oncologist within the neuroendocrine cancer care team, how surgical decisions are made, and what patients and caregivers can expect when surgery is part of their treatment journey. So welcome, Dr Concors, it's wonderful to have you here, and as we get started, I'd love to hear a fun fact about yourself and also how you got involved in neuroendocrine cancer.

Dr. Seth Concors 01:35

Thank you. I'm really excited to be here talking to you and your listeners today. I value any opportunity to talk to folks about a disease that I'm very passionate about taking care of, and hopefully some folks will learn some things about what I do and what we do here at Emory. So I am, like Lisa said, a GI surgical oncologist at Emory University, I have been here for several years now. And before that, I was in training at MD Anderson. Before that, the University of Pennsylvania. My path to neuroendocrine tumors was actually probably a little bit more linear than maybe some other folks. The University of Pennsylvania where I did my residency training is a pretty strong hotbed for neuroendocrine and neuroendocrine research. Some of my mentors were just very interested in that field. And the folks that I sort of followed into surgical oncology from General Surgery were really into neuroendocrine tumors, and I started doing some research projects with them, and started taking care of patients with neuroendocrine tumors, and developed some close relationships with those patients. And that interest only grew at MD Anderson, yet another hotbed for neuroendocrine care. And then coming here to Atlanta and starting my clinical practice at Emory, I knew this was something I really wanted to focus on and knew this was a patient population I wanted to take care of. And with the excellent multidisciplinary team here that I think we'll be talking about a little bit today, was able to establish what has quickly become a pretty busy practice.

In addition to my pretty busy life as a surgeon and an educator, I help run the residency and fellowship programs here and doing some research, very into music. Being originally from New Jersey, I love Bruce Springsteen, and today, actually, I bought tickets to see Springsteen for the 40th time. So, coming up in May, I will see him for the 40th time, and that includes following around Europe briefly at the end of my fellowship.

Lisa Yen 03:15
Wow, how exciting. So, I love that you were inspired by people, by mentors to go into neuroendocrine, and you're also passing that along, training others by leading the residency program there. And look, you have someone else you're following around outside your professional world with music. And who better than Bruce Springsteen? How fun is that?

Dr. Seth Concors 03:37
Yeah, the Boss. At the last place in Europe I stayed, I stayed in the same hotel as him and the band. Went down to the hotel bar for dinner after the concert and got a big picture of me and the entire band. I sent them over drinks, and it was like pleasant surprise at the end of my two weeklong trip to Europe.

Lisa Yen 03:52
That is such a fun fact.

Dr. Seth Concors
Yeah.

Lisa Yen 03:54
You're almost on a first name basis. Wow, wonderful. We love the story of how you were inspired. I mean, you knew you wanted to go into neuroendocrine cancer. Some people may know a little bit about surgeons and their role in the neuroendocrine cancer field. And at the same time, we hear lots of different terms. I think the one that comes up most often right now may be **surgical oncologists**. What is a surgical oncologist and what kind of training does that involve? And is that the same thing as a surgeon, or is that more oncologists?

Dr. Seth Concors 04:24
It's a great question, and there are a lot of different paths folks take to getting into the neuroendocrine field and doing surgery on patients or taking care of patients with surgery within neuroendocrine tumors. So, general surgery is a five-to-seven-year program coming out of medical school. And during general surgery residency, you can take time away to do research. And so, I did seven years of general surgery residency with two years of research. There was a translational clinical trial-oriented time. After general surgery residency, folks can choose to subspecialize, and one of the many paths people can choose is surgical oncology. And so, individuals who are board certified in surgical oncology take two additional years after their general surgery and specialized training in oncology. So, we're general surgeons who do specialized training in oncology. Out of surgical oncology, sometimes folks become **HPB or hepatobiliary surgeons**. There are a couple of different paths to being HPB surgeons. This is just one of them. And similarly, folks can choose to go into **endocrine surgery**. And so, in the field of surgical oncology, some folks choose to specialize even more based on their training and expertise and experience. And that's how my career landed me where I'm at.

Lisa Yen 05:32
Wow, that's a really long road, general surgery, additional training to specialize in cancer surgery, surgical oncology, and then perhaps some people train further for HPB or hepatobiliary surgery.

Dr. Seth Concors 05:45
There are programs where, essentially, you know, either in your second year of surgical oncology training or for an additional third year, you even more subspecialize. And so, in the second year of my surgical oncology fellowship, I chose to focus on hepatobiliary and neuroendocrine type surgery, as well as a couple of other little specialties that I engage in.

Lisa Yen 06:03
So, when someone is looking for a surgeon, how can they find that someone who's the right fit? And how do they know if they need someone who is this HPB surgeon, a general surgeon, a surgical oncologist? How do we know?

Dr. Seth Concors 06:17

It's a great question. I think a lot of it has to do with finding the person who you most trust as a patient. I think that is the first most important principle. While training is critically important in finding someone with subspecialty training and expertise in the area where of neuroendocrine tumors is important, I think you obviously have to have a good rapport and a good relationship. That really can only be built in meeting with folks.

I think once that relationship is sound and you trust the individual who's sitting in front of you, I think you really have to dig into credentials. Most major academic medical centers and even private practice surgeons have websites that list whether they're board certified, which is an extra level of credentialing from our National **American Board of Surgery**, which is our national credentialing body, and surgical oncology is a separate board certification. And so that qualification gives you a certain level of expertise and signifies that you've passed some standards set by our national societies.

I think, more importantly, in meeting with a surgeon for patients with neuroendocrine tumors, I think surgical oncologists really are the cornerstone of caretakers for patients or surgical caretakers for patients with neuroendocrine tumors. I think you're drilling down on asking surgeons, what's their level of familiarity with neuroendocrine tumors? How many of these tumors do you take care of, or how many patients do you take care of in a given year? How much research have you done in this field in this field? How engaged are you in the field? I think your listenership will have a lot of experience recognizing that these tumors are rare, but not so rare, and caregivers experience can be variable, and so I think you really want to find someone who's had a lot of experience and who has an eye to the emerging literature.

Lisa Yen 07:54
So while trust is the core, and that relationship is really critical, also looking on websites and finding their board certification and their familiarity with neuroendocrine tumor and engagement in the community.

What about specific surgeries and operations? How would patients know whether a surgeon has experience with the specific operation they need, such as a Whipple or a liver surgery or lung surgery, and when they're looking for that? I think it's hard, because people may just be looking, in general for a NET surgeon, but then not know which type of surgeon they should be looking for.

Dr. Seth Concors 08:28
I think that's a really good question, and something that I get asked a lot in clinic. And I actually I'm reassured when people are asking that, because I think they're asking the critical question, “How much experience do you have doing this very serious operation on myself or my loved one?” And I think I am never upset or embarrassed or angry if a patient asks me, how many patients have you taken care of with this disease? How many times have you done this operation? How familiar are you with the complications of this operation? How familiar are you with taking care of patients who have had

multiple operations before? How common is this operation being done at this hospital or at this Cancer Center?
I think those are all really important questions, and I actually encourage patients to ask me that, and I feel reassured when they ask me that, because it builds that trust in the relationship. And so I think that's probably the best way to drill down on it, really just how many of these are you doing, and how do other patients do with the same operation.

Like I'm lucky in that I have very early in my career, built and been part of a pretty busy neuroendocrine practice, and so I at least have the opportunity to say, "Well, I've done X, Y and Z operation two times this week," because that's just how my practice has played out. And I think there's some data out there that says for neuroendocrine specific cancers, folks should be doing somewhere between **5 to 10 of them in any given year**. I think that is generally a reasonable number to have a level of expertise to provide the high-level care that loved ones would need.

Lisa Yen 09:49
You gave us a really excellent list of questions. I think that'll be helpful, and I'll refer the listeners to the transcript, because you just listed a bunch of questions people can ask. It really is that open discussion.

So just to clarify, you said five to 10 a year of a specific operation. So, you're saying like 5 to 10 whipples, 5 to 10 lung surgeries?

Dr. Seth Concors 10:07
I mean the data that I'm referencing. There's some papers that show better outcomes for folks. That's for small bowel neuroendocrine tumor. So specifically, doing more than five small bowel resections in any given year, I think generally people who do somewhere on the order of **30 to 40 Whipple procedures** in any given year is considered on the higher volume side of things. Certainly, that number would vary if you're talking about minimally invasive procedures which carry an even higher level of expertise, and specifically for things like the Whipple procedure, oftentimes, the number is less important for neuroendocrine tumors than the number you're doing overall, just given the degree of complexity of that operation.

Lisa Yen 10:43
I'm going to circle back to something else that you said about asking their familiarity with neuroendocrine tumor specifically, how important is that for a surgeon, then to be familiar with neuroendocrine tumor specifically? So many surgeons, for example, do surgeries on small bowels. But does it have to be someone that is familiar with neuroendocrine tumors?

Dr. Seth Concors 11:00
I certainly think so. I think small bowel resections are very, very common for a huge number of different diseases, and I think there are going to be a large number of surgeons at any major medical center or

even the number of community centers who do small bowel resections. But I think the perioperative considerations, what you want to do before surgery, how you want to take care of someone during surgery, the places you want to look, the extent of the amount of surgery you want to do, how you take care of people afterwards. Really being familiar with neuroendocrine tumors makes you better at the surgery and makes you really drill down on some of the considerations that are critically important.

And so, I can't tell you the number of patients that I see in my office who I have to do repeat operations on. And that's in large part because people present in emergency circumstances, and they're going to get the best care to save their lives in the acute setting. But I think given the choice and the opportunity to go to someone with a lot of experience with neuroendocrine tumors, that's really what I would encourage patients to do.

And I think the other part that's really important that a neuroendocrine specific surgeon offers is that interface with the medical oncologists and the complex decision making, especially in patients with metastatic disease. And probably circle back to this a little bit later, but a vast number of patients, especially advanced metastatic patients, qualify for surgery for any number of circumstances. And I think really, the circumstances surrounding when you decide to operate on those patients has to be pretty well planned out in conjunction with a neuroendocrine medical oncology expert, and has to be done at a very high level to make a meaningful impact on someone's care, and in those circumstances, that's not something, at least I think someone should be doing once or twice a year.

Lisa Yen 12:37
So, there's nuances to the surgery and everything surrounding the surgery, and most importantly, with the overall care, the interface with the team, including the medical oncologists.

One clarification, when you said you do repeat surgery, you're talking about someone had surgery somewhere else, and then you're going back in.

Dr. Seth Concors 12:54
Exactly. The most common circumstances, someone comes into the small bowel neuroendocrine tumor that's causing a blockage or an emergent problem. Very well intentioned and correct surgeon. Acute care surgeon mostly takes them off to the operating room and solves a critical problem. And commonly in those scenarios, we're going back to the operating room, 2, 3, 4, months down the road once they've recovered from the first operation, to perform the formal oncologic operation they need to resect all the cancer. And so, certainly had the problem been recognized sooner, they may get to a neuroendocrine expert, they would get one operation that would address all their problems. And so, you know that circumstance is not always an option for patients, just given how everyone presents with this disease, but I think it's, given the choice, I think, and all the considerations that go into deciding about surgery for some of the neuroendocrine tumor, I think a neuroendocrine expert offers a lot of value.

Lisa Yen 13:54
And is there a difference? I mean, many people are like, well, I like to go to this hospital that's close to me. They see, you know, a few hundred people. It's more community-.based, but it's so close. I know these doctors. My regular doctor goes there. Is there a difference between going there versus a larger academic institution, one that's maybe even further away, but has a bigger institution, an academic center? What's the difference, if any?

Dr. Seth Concors 14:06
Yeah, I think that's a really hard tension, and something that a lot of fields in medicine and in surgery are reckoning with. I have some colleagues that have done some research into this in pediatric surgery and basically patient facing research where they ask the question, what level of decrease in the quality of care are you willing to accept for something that is closer to home, recognizing there's financial constraints and some pretty serious considerations about traveling a distance for care.

I think what patients and caregivers might not recognize is that not every facet of care has to be at a large academic medical center. If you're diagnosed with a neuroendocrine tumor, most of your care, in fact, imaging, follow up can be done at the local community center, under the direction or in collaboration with a major academic center. So, I take care of hundreds of patients who I see. They come down to downtown Atlanta, they brave the traffic, and we take care of them, do surgery on them, get them through that, and between myself and our medical oncology colleagues, collaborate with their providers close to home. And so, in that way, a lot of our patients can get that high level of care with as few trips further away from their caretaker network as possible.

Lisa Yen 15:15
So, it can be done in a collaborative effort.

Dr. Seth Concors
Absolutely.

Lisa Yen 15:19
So, say someone is willing to brave the traffic and come to downtown Atlanta to come see you. What should patients expect at their first appointment with you or another surgical oncologist?

Dr. Seth Concors 15:30
I'm privileged to work in a multidisciplinary neuroendocrine clinic. And so, for the vast majority of patients that come into Emory with a new diagnosis of neuroendocrine tumor, whether that's localized or metastatic, whether it's been completely worked up or not, they come in through our multidisciplinary program. And so, what that means is, prior to their visit, they're going to be contacted by nurse navigators, who are going to work through getting the records, getting the imaging and making sure we have all the data in front of us that we need to make a collaborative decision. When they come in to see

us, they're not just going to see myself, they're not just going to see medical oncologists in isolation. We're going to all have reviewed the case. We're all going to look at the imaging, met in a mini tumor board with nutritionists, social workers, nuclear medicine, interventional radiology, and come up with a comprehensive plan based on imaging and the story, and then all come in together and talk with you and your family member about what our recommendations are. And then close the loop, have a clear plan going forward. Here are the next two or three or four steps, and here's when you're going to come back to see us again, or here's how you're going to follow locally.

I think in that way, I'm not just seeing folks who referred to see a surgeon. The medical oncologists aren't just seeing folks who referred to see medical oncology. We're all seeing neuroendocrine patients together and making collaborative, multidisciplinary decisions together, which is essentially, and I feel strongly about this, how you should decide to take care of any patient with a neuroendocrine tumor.

Lisa Yen 16:51
That sounds ideal, and also time efficient, so that people are getting the information and perhaps answers and clarity in a timely manner.

Dr. Seth Concors 17:00
Yeah, I think we try our best, and one of the main motivators for this is try our best to present folks with as much information and decision making we can in one visit. Not “Oh, I need to go talk to your medical oncologist. We'll call you in the next couple of days and get back together with you.” But we're all sitting here. We're all going to side together, and we're all going to talk to you about what's your priorities and come up with a comprehensive plan. And you know, follow up visits may be with just one member of the team, depending on at that moment, who is the most important part of the treatment plan, but I think at least it's **critical moments** when patients are first diagnosed, whether or not their cancer is returned, whether or not their cancer is progressing, they meet with that whole team again and make new decisions as a multidisciplinary team.

Lisa Yen 17:42
That's really interesting that you do that. And during that first visit, what key information are you usually trying to communicate with the patient and their family members?

Dr. Seth Concors 17:51
I think at first, I just want to make sure that everyone understands exactly what's going on. I usually lead each visit by asking a very simple question, "**What do you understand as going on inside your body right now?**" And just let patients talk to you. And I've been pleasantly surprised with how much information patients have about exactly what's going on at any given moment, and that just level sets. Okay. Now I understand what you know, and sometimes I'll get messages read back to me about exactly what neuroendocrine tumors are and where they are and how fast the tumors are growing, things that I'll explain later, but it really importantly, sets the stage.

And I think from there, I spend a fair bit of time going through the imaging, sharing the imaging with patients. I can't tell you how many patients come into the office and their families and never having seen CAT scans and MRIs that have been done for years. Actually showing them what I'm seeing and sharing with them my interpretation of the imaging. And then, of course, doing things like physical exams and labs and whatnot, and then sharing our treatment plan, making sure everyone is very clear about understanding what the next few steps are, and making sure everyone's on board and knows what's the point of contact. I really try to stress that after our visit; no one should be confused about who they should talk to and who the quarterback is. I actually use those words, "From right now until after surgery, I'm the quarterback of your care. After that, Dr X, Y and Z, medical oncologist becomes the quarterback, but I'm still involved. I'm still on the team." And I think from that end, I try to alleviate any confusion about who's the point person between now and the next time you interact with the medical team to answer any questions that may come up. And I think the other element that really needs to be talked about is we have with us clinical trial nurses and nutritionists and social workers, all they may filter into the office and talk to patients, depending on what the concerns are, what we may be offering.

Lisa Yen 19:36
There's a lot that you cover for sure, from the starting point wherever that is, to all the information about the disease, diagnosis, treatment plan, and I really appreciate that communication piece, who needs to be the point person, and how and who and when the patient would communicate with each of those players.

Dr. Seth Concors 19:53
Absolutely. You know, having had a number of family members with cancer, and having been through this process myself; I can't tell you how frustrating it is to not know who or when to communicate with, or really what the next actual step is. And so as discreet as possible, I try to communicate. Here's the next step, here's the next time we're going to be in touch, and here are the action points before we meet again. I think that's important to just keep everybody on the same page and keep momentum moving forward in someone's care.

Lisa Yen 20:19
And that's really practical and helpful so people know who's the go to person. And actually, that leads into the next question really perfectly: How often should patients expect to see their surgical oncologist, and at what point in their care?

Dr. Seth Concors 20:30
It really depends on what the surgical oncologist is offering for someone that I'm planning surgery on; I very rarely meet someone and operate on them after our first visit. It happens, but especially for the more complex situations, I try to have at least one or two visits with folks, because just like you were mentioning before, people's heads are spitting after all the information I'm giving them, and they don't even know what questions to ask. And so, I really try, whether it's in person or virtual or on the

telephone, meet with folks at least twice before a big operation or even a small operation. Every operation is big, if it's happening to you, I think going into surgery, you'll see me the day of surgery. I always make sure I say hello to the patient and their family member the morning of surgery. And then after surgery, I typically see folks two to three weeks afterwards, and that's when what I've taken out gets reviewed under the microscope, and we go through that and talk about next steps from there. At least in our practice at Emory, we generally get a new baseline CT scan and a new visit three months after surgery.

So after that post operative visit, I generally see folks at the three month mark, unless there have been speed bumps along the way, in which case, obviously I see folks more often than that, sometimes at the one to two month mark, and then after that three month scan, the cadence of scans really depends on how frequently their cancer dictates we follow them. So most commonly it's in the six-to-12-month range. Those first few visits are typically done in concert with medical oncology. And then the further people get out from surgery, the more spaced out their scans and visits with me and my team will be, and the more we'll do things like alternate care between myself and the medical oncologist, or even rope in some of the excellent APPs that I work with on the neuroendocrine team.

Lisa Yen 22:05
So, it can vary, and then it can kind of be spaced out further and further with time. Now, with other cancers, many people are familiar that after five years, maybe they can stop scanning and they're declared cured. Can you speak to this in terms of neuroendocrine tumor? I've heard people say, “Hey, maybe I can stop after five years, or maybe not, and maybe I have to be scanned the rest of my life.” So, what is your take on this?

Dr. Seth Concors 22:28
Neuroendocrine tumor is different, and I think your listeners would probably understand that. And I think for neuroendocrine tumors, in general, I don't stop following people. We've seen in the data, folks where cancer pops up very late. And that's not to scare folks, it just essentially, I want to keep an eye on you and catch it before it becomes a serious problem. And so, in general, I don't stop surveillance after resection for a neuroendocrine tumor, with the caveat to that being as long as it makes sense for people's medical history. So, if someone was developed a serious heart or lung problem and it doesn't make sense to follow for a neuroendocrine tumor, then I'll usually say we don't need to follow anymore. But in general, I wouldn't stop surveillance after resection for a neuroendocrine tumor.

Lisa Yen 23:11
So how long then would you continue to scan new patients?

Dr. Seth Concors 23:14

As long as it makes sense for their health, we may continually space them out and perhaps even get a scan every other year, but I would advocate strongly for surveillance for as long as it makes sense for people's overall health. So, without a stop date,

Lisa Yen 23:26
Without a stop date, so longer than 10 years, longer than 15, longer... it could be lifelong.

Dr. Seth Concors 23:31
Yeah. Unfortunately, the data does show that there's a very, very small percentage of the population where these cancers come back at the 15-to-20-year mark. And these are large studies, largely at Canada, where they have the provincial level data to look at recurrences past 15 years, and there's still one or two patients where things pop up. And so, I think as long as people understand that.

And I think one aspect of this that becomes a little bit concerning is the cumulative radiation of following. You know, you're gonna get scans so often. Isn't there a risk of all that radiation? By and large, we choose to follow patients with MRIs that don't have radiation. And so yes, there is time and monetary consideration, but as long as it makes sense, I follow people forever.

Lisa Yen 24:06
I think that's really helpful, and that's a really important point. Really big difference from other cancers. And I'm sure you've seen people in the community who stopped scanning after five years because their person was not a neuroendocrine tumor specialist. And unfortunately, it reoccurred and really having that critical understanding that needs to be lifelong as much as it makes sense.

Dr. Seth Concors 24:27
Oh, absolutely.

Lisa Yen 24:28
Nuances with neuroendocrine tumor for sure.

Dr. Seth Concors 24:30
This is specifically one area where NCCN and these major guidelines really are lagging in what is practical and what is evidence based. And I think that's something that as a community, we're advocating for changing.

Lisa Yen 24:41
Yeah, it needs to be changed. I know there's a lot of questions and debates about that in the patient community. And thank you for clarifying and really highlighting the importance of lifelong scanning.

Now for surgery specifically, how do you determine whether someone is a surgical candidate? I mean, you talked about it's possible even with metastatic disease. So how do you determine this?

Dr. Seth Concors 25:02
I like to tell people there are a couple specific scenarios where surgery makes sense. And of course, there's always some nuance to this. And so, thinking outside the box may add to this list, but I think top of the list in my mind is patients with a resectable or removable tumor, where we're removing their cancer for **cure**, whether that's pancreas neuroendocrine tumor, small bowel neuroendocrine tumor, appendix, et cetera. When we know they've got one of these cancers, it looks removable and we don't see any distant disease. So, we're doing that operation. The intent of that surgery is for cure.

Lisa Yen 25:30
And what do you mean by cure?

Dr. Seth Concors 25:32
So, removing the tumor and rendering them without any evidence of disease. Obviously, those folks are still going to be followed to make sure it doesn't pop up elsewhere, but we're doing it for the hopes that it never pops up anywhere else or occurs and so we're removing them with the hopes of taking all the cancer out. So, I think that's the first big category.

The second category is **advanced metastatic** patients, and for those folks, it's a much more nuanced conversation. That's really where the multidisciplinary team comes into play. The timing of which is and figuring out when it makes sense is nuanced. For me, I'd like to talk about what is the motivation behind surgery. Well, if patients have specifically with small bowel and pancreas neuroendocrine tumor, appendix, stomach, but GI neuroendocrine tumor with a pattern of metastatic disease where it looks like I can go in and resect everything that I see, I will oftentimes recommend surgery.

And recognizing that these are advanced metastatic patients, and the vast majority of them, if not all of them, will develop recurrent cancer. That doesn't mean there isn't value in going and resetting the clock for them, taking out all of the disease that I see, specifically, clearing out the liver with cytoreduction and rendering them, at least for a time without any evidence of disease. And in concert with medical oncology in those patients, we can consider things like stopping systemic treatments, stopping things like lanreotide or octreotide for a time. As long as everyone recognizes at some point, we know, especially once this cancer is spread to the liver, it's going to come back. If I can take it all off and give somebody two or three years off of lanreotide, well, gosh, I think that's worth it. Obviously, we have to be worth it for a patient who's going to undergo surgery, and they have to understand that this isn't a cure, but it is just one treatment in a long line of treatments, they may end up.

Lisa Yen 27:14

So, if I'm understanding this correctly, in this first bucket, if a tumor is in one organ and you're able to **cut it all out** for the intent of **cure**, you would do that or offer that. Of course, in light of what we've talked about earlier, you would still continue to do surveillance scans lifelong.

Dr. Seth Concors
Absolutely.

Lisa Yen 27:30
And then in the second bucket, even if it's spread to the liver, they may still be a candidate for surgery to cut out everything that can be seen, to kind of **reset the clock with understanding that it is not necessarily a cure. It may come back, but it's still helpful**.

Dr. Seth Concors 27:45
Yes, exactly. I think that's a very succinct summary of the two main reasons I'm offering surgery. And I think, like anything else, especially in the second bucket of patients where it's spread to the liver, it's a nuanced conversation. You have to understand, if they presented with the tumor and the tumor in the liver, for example, we call that **synchronous disease**, that is everything presents at once. We might want to do a trial of systemic therapy just to make sure we understand exactly where all the cancer is. There's nothing worse than going in and not really understanding where everything is. So maybe giving some systemic therapy for a time, really trying to get to know someone, get to know their cancer, so to say, and then operate on them in a bit. Or if somebody, let's say, has their small bowel tumor out and two or three or four years later pops up with a liver tumor or two. Well, gosh, that tells me their tumors are very, very slow growing. So, clearing their liver of all tumors at that point may make a fair bit of sense. And so, surgery to clear all of the disease, especially in the liver, and I'm talking a lot about the liver, because that's, as our literature knows, is the most common place where this cancer comes back, is something we would offer in those two circumstances.

The third big bucket that I think about quite a bit is for patients who have **symptoms**. Someone who has a large number of tumor in their liver, for example, that I don't think I can successfully cut all out, but are developing symptoms from a small bowel tumor, symptoms from a rectal tumor, symptoms from a duodenal tumor. Well, as long as the disease seems reasonably controlled, and depending on how the symptoms are and how fit or functional a patient is. Surgery in that circumstance, I think makes a lot of sense. I can't tell you the number of patients who have, especially with small bowel, developed slow onset symptoms over many, many years. And they come in and you quiz them, has your diet changed? No. Do you bloating? Do you pain? No. And then you're like, Well, what were you eating 10 years ago? All of this food. What are you eating now? Well, mostly I'm just having some liquids and soft food. Well, then over the last 10 years, your diet really has changed. And I can't tell you the number of patients I've I've sort of got back to eating a more regular diet, because their tumors are more symptomatic than maybe they think they are. And so that's one circumstance where I might consider operating for symptoms.

The other place that GI neuroendocrine tumors can spread is the **lining of the belly, the peritoneum**. And in that circumstance, tumors in the lining of the belly can push on things and cause symptoms. Can push on I've seen it push on nerves that cause pain in people's thighs or legs. I've seen it push on the diaphragm and cause pain. And in those circumstances, I think the goal of therapy is to relieve those symptoms. We know people are going to live are going to live, in general, for a long time with this cancer. And I want to give people the highest quality of life as possible. And so, as long as patients understand the goal is not to cure is the goal to give you high quality of life, absolutely entertain doing a surgery like that. I think to good effect.

Lisa Yen 30:29
I know we're talking about liver surgery a lot and just that even patients, when they first find this disease, a lot of times it shows up first in their liver. It can be really scary and just the idea that it went to their liver is scary. And I know we're talking about like, just like, oh, an everyday kind of thing, but just to put it into context, I think in a patient's mind, when they hear that this went to their liver, I mean, it's devastating news. And yet you're talking about that it can be removed. How's that possible when liver is such an important organ?

Dr. Seth Concors 30:59
Yeah, absolutely. When you start talking about liver surgery, the first question I often get asked is, "Well, my liver will grow back, right?" It's a little more nuanced than that. The interesting thing, and the thing that makes neuroendocrine surgery specifically unique, is that oftentimes these tumor is going to be removed from the liver without taking out any of the normal liver. I did that procedure this morning, and I can pretty confidently say I took out less than 1% of this patient's liver, normal liver. And so, while, yes, you cannot remove someone's entire liver, you can frequently do these operations preserving the normal liver. And so, just removing the tumors, or ablating or burning the tumors within the liver. And the goal is to treat everything that I see, knowing it's going to pop back up, but kind of resetting the clock back to before it was spread in the liver that we see.

Lisa Yen 31:46
Yeah, and that's different from other cancers, right? Because if other cancers, you're cutting out more of the liver?

Dr. Seth Concors 31:52
Absolutely. Most common of which, and I think what people may read a fair bit about is colorectal cancer, where we tackle and remove tumors in the liver. And the technical considerations for surgery in that disease are far different than a neuroendocrine tumor. And yet another reason to go back to our earlier point that a neuroendocrine expert is really where you ought to be for this type of surgery.

Lisa Yen 32:11

Yeah, really different from other cancers. So really having someone who understands neuroendocrine tumors and how they behave different, and how the approach is different. So, on the flip side, unfortunately, if someone's not a surgical candidate, at least in the beginning, does that mean surgery is off the table forever?

Dr. Seth Concors 32:29
Absolutely not. I will say that for every patient that I meet with metastatic cancer, I will say two thirds of them, at some point, will receive surgical care for one reason or another, whether that's because we get control of their tumors through systemic therapy or liver directed therapy with our interventional radiology colleagues, and then taking care of the primary tumor where this all started. We're addressing one or two spots that are growing may become a priority. There are a lot of different reasons why surgery may play a role, even if surgery, off the bat, isn't what makes sense. And I think I don't mean to keep plugging the multidisciplinary model, but that's another reason why I think our multidisciplinary model is really excellent, is because myself and the medical oncologist are really seeing everybody and looking at everybody's scans all along the way. And I can't tell you the number of times where the medical oncologist has ping me and said, "Maybe you should consider surgery here." I've pinged them and said, "Maybe you should consider this medical therapy here." When maybe our brains weren't necessarily thinking about that. And so, I think that multidisciplinary model keeps every therapy on the top of everyone's mind at every time point for patients.

Lisa Yen 33:43
And when do you decide to shrink something, maybe with medical therapies before surgery, versus doing surgery first and then going to do something medically later?

Dr. Seth Concors 33:11
That's a really good question. I think it comes up most commonly for the tumors in the liver and for tumors in the pancreas, just because of some of the technical considerations of those types of surgeries. I think specifically, if we're talking about tumors in the pancreas, when we see something that's large or touching or invading blood vessels that may present some technical challenges, you might consider a medical therapy to shrink things down a little bit. In the liver, you may want to gain some stability or shrink down one or two tumors with a liver directed therapy before going to the operating room, just to limit the extent of your surgery.

So, I think they're important considerations. I think most commonly, what myself and the medical oncologist, they're thinking about, is meeting someone who presents with new diagnosis of neuroendocrine tumor that is metastatic, that has spread to the liver. And giving someone a systemic therapy just to make sure things stay the same, to really understand how fast these tumors or how not fast in most circumstances, they're growing, to make sure that I'm removing what I intend to remove and removing the full extent of the disease. I'd hate nothing more than to rush right into surgery and on the

next scan, I'm seeing four new tumors because I didn't give some treatment and I didn't get a chance to know the cancer and know how fast the cancer is growing.

Lisa Yen 34:50
It's definitely a complex decision. And people often wonder too, can you have more than one surgery for your liver, especially for your liver, safely over their lifetime?

Dr. Seth Concors 35:01
Absolutely, I have done second time **liver cytoreduction or liver removing surgeries**, and even thought about doing third or fourth time. Think it just depends on kind of where the tumors are, how big they are, and how fit and functional patients are. That's the complex but also really interesting thing about taking care of patients with neuroendocrine tumors is that we're moving very little normal liver tissue, and so that really plays into the decision making.

Lisa Yen 35:24
Another concern that patients have, if major surgeries, such as extensive liver resections, might affect their eligibility for future treatment options. Would that be the case if at all?

Dr. Seth Concors 35:37
Certainly possible, especially when you start talking about things like major liver resections, removing half of the liver, which sometimes, but rarely, but sometimes makes sense for specific circumstances. I think when you're making the decision to do major liver surgery, at least I in our multidisciplinary tumor always keeping an eye to what is the next treatment, and treatment after that, and the treatment after that. So we're not making a decision that's going to close any doors to any patient. In fact, sometimes surgery opens the door for additional therapies. One thing we often think about is that giving something like PRRT therapy, especially for folks with small bowel neuroendocrine tumor can can cause troubles, can make the small bowel tumor respond so well that patients end up in dire straits or having problems with bowel blockages, and so occasionally, based on how people are doing, we may do surgery to open the door for treatment.

Lisa Yen 36:24
Okay, so it might do the opposite. It might open the door. I know that we've already been talking a bit about the multidisciplinary care team that you lead at Emory. And just in general, how do surgical oncologists work with a multidisciplinary care team for neuroendocrine tumor patients? Patients may not be familiar with this, and maybe they don't have an institution where they get to meet everyone in the same room, the same clinic. How do the surgical oncologists work with the care team? What should they be expecting?

Dr. Seth Concors 36:53

There's a lot of different ways myself and the medical oncologist interact, and it's really institution dependent. I think, in the big picture, surgical and medical oncologists work together on tumor boards. Most major academic and clinical practices have **multidisciplinary tumor boards** where medical oncology, surgical oncology, radiology, and interventional radiology all come together to make complex decisions, and so when patients are facing challenging decisions or inflection points in their care, I think asking, “Hey, has tumor board talked about this case? Have you talked about this case with other surgeons, with other medical oncologists?” I don't think I've ever met a surgeon or surgical oncologist would be upset for a patient advocating for their case to be presented at tumor board. For me, that would just tell me that someone is a savvy patient and wants the most comprehensive care possible.

Other ways that we interact are through the national societies. I mean, I know I'm heavily involved in NANETS, and so I interface with a lot of medical oncologists, and I'm sure a lot of neuroendocrine surgeons and medical oncologists do interface at that national level. At a lot of institutions, patients’ clinics are right next to each other. So, at Emory, and I know it a few of the other places where I worked before in major cancer centers, my clinic is right next door to the medical oncology clinic. And so, if I'm about to walk in to see a patient and I hadn't had the opportunity to talk with their medical oncologist, first thing I do is walk over their clinic, knock on their door and say, "Hey, can we talk about this case before I pop into the room?" And I, I think that's pretty standard practice at a lot of places.

But you know what I really say is at major inflection points in care when major decisions are making about surgery, the next medical line of therapy, tumor board is your friend. Advocating for yourself, asking for your case to be presented to tumor board, asking for second opinions amongst other medical oncologists, asking, "Hey, when's the last time you talked to my medical oncologist?" You know, "Can you include me on those messages on the electronic medical record?" All extraordinarily reasonable and just tells me that somebody is really engaged in their care.

Lisa Yen 38:42
Some people may know about tumor boards, and some people may not. And when you talk about tumor boards, what should the expectations be? Should it this be a NET-specific tumor boards, or what if someone has lung NET, should that be going to lung NET specific tumor board? How is this done?

Dr. Seth Concors 38:25
It's very institution dependent. At most places, it's disease-site oriented. And so, for example, at every institution I've worked at, there's been a gastrointestinal tumor board, a thoracic tumor board, and I think patients should expect expert individuals in that disease site on the tumor board. And that's sort of the tumor board where the case should be presented and is most appropriate. So, for example, at the gastrointestinal tumor board at every institution I've worked at, it's been surgeons, medical oncologists, geneticists, interventional radiologists and sort of just a whole number of the team. And one should expect that to be the case regardless of disease site.

Lisa Yen 38:57
So, it varies by the institution. Patients also often say, "Oh, I wish I could be a fly on the wall, or I wish I could attend and hear what's going on." Can you speak to that?

Dr. Seth Concors 39:45
Yeah, I think there's a lot of protected health information that gets discussed. So, in general, patients aren't formally invited to tumor board. I think it's very reasonable to ask your providers what was the nature of the conversation and what was the general recommendation. At a great number of institutions, a tumor board note gets written and put in the chart that you could probably view through the electronic medical records summarizing the discussion who was present and what the ultimate conclusions were. I tell all my patients I have clinic on Wednesday's tumor board for us is Tuesday nights, and so if I'm meeting you on a Wednesday, I say I'm going to present your case next Tuesday, and I'm going to call you during my next clinic on Wednesday and talk about what we found. I didn't make up that practice, that's been from my mentors. So, I think that's what a lot of surgical oncologists at least do.

Lisa Yen 40:25
Yeah, that's helpful to know who's following up and who's going to be communicating the conversation, discussing results and when.

Earlier in the conversation, we were talking about how you collaborate with providers at different institutions, so perhaps someone closer to home for patients at a local or community center, how do you do that collaboration with local or community doctors? Talk a little bit about that.

Dr. Seth Concors 40:49
I think probably greater than 50% of my patients have a local oncology team that is their immediate close to home point of contact. And so, very quickly, after getting into the Atlanta area and moving here, my team and the cancer center introduced me to sort of the members of the Atlanta, the Georgia, the North Florida, Tennessee, Alabama community, and I've got a small community of medical oncologists and surgeons on speed dial. And so, I can't tell you how often it is that I get patients asking for referrals. Hey, do you know someone closer to home? I just I Google their city if I don't happen to know it, and I can give them a recommendation of someone that I've known and work in collaboration with. We also have a fair number of nurse navigators who will follow up with patients and help liaise with outside medical oncologists or surgeons. And so, I think as best it can be, the communication is seamless. There's always speed bumps with medical records. But I also want to stress that most often, the onus is not on patients to sort of be the caregiver for their records. I try to make as big an effort as I can in my clinic with my nurse navigators, with my clinic nurse about saying, "it's not the patient's responsibility to give me their records or bring me the CD of their cat scan they might have got closer to home. This should be seamless. It has to be seamless. It has to be easy for me to see what's happening where the majority of care is happening." And I do feel like we do a good job executing that.

Lisa Yen 41:40
Yeah, it's helpful to have a team helping with a follow up and the records and such. And speaking of scans, you alluded to that they might have gotten a scan closer to home. And this is often a question, "Should people come brave the traffic, go downtown, get a scan at Emory or some other academic, a larger institution or closer to home? Is there a difference in quality, and where they get it done?"

Dr. Seth Concors 42:12
Yeah, I think for some scans, the answer is yes, I do ask people to brave the traffic for them, specifically when we're talking about things like **dotatate scans and MRIs**. I do think I'm trying to compare apples to apples, and rather than comparing two different scans on two different scanners done in slightly different ways. And so, usually for those types of scans, I ask that people get them at my institution so that my radiologist can look at things.

For CAT scans, run in the mill routine follow up, I am very comfortable using outside imaging, and this may be a little bit of a controversial answer, but I'm comfortable using outside imaging, and that doesn't preclude our radiologist from looking at it often. If there's a question or I don't feel comfortable seeing something or comfortable seeing something, or I want my radiologist to get a little bit more nuance, I'll nominate it for a second review and have our expert radiologists, who see a lot of neuroendocrine tumors, look over the scans again. And so just because you get your scan closer to home doesn't mean you're not getting that expert eye.

Lisa Yen 43:26
So even if they do get scans closer home, you're reviewing them as well. And there are certain scans that you prefer for them to come to you or another academic institution. There may be a difference, especially comparing apples to apples.

And with scans, who is the one that would then review those images to the patient, and how soon after scans should patients expect to hear or discuss the results?

Dr. Seth Concors 43:50
It depends when they're doing them. If I am looking at someone for preoperative surgery, certainly my my job is to review the scan with you, show you a scan in the clinic and make sure I'm going through each step of what exactly I see and where I see it, and addressing any concerns. Almost universally, patients will see the read of their cat scan and ask me, “What does this mean, and what does that mean?” And I actually really appreciate that, because, again, that tells me that you are super engaged in your care, and so I do appreciate that. I think when we're talking about things like **surveillance imaging**, it just depends on when the imaging is done. Oftentimes, when I set up patients to come back and see me after their cancers have been removed and we're just watching them, I'll get scans in the morning and see them in the afternoon. So, kind of bundle up the visit in one day. I'll pull up the scans, we'll review them, or my APP will pull up the scan and review them, and I'll say, "Here's what I see. I don't see anything. I

think the scan looks good. I'm going to wait for the radiologist, and then we're going to close the loop as soon as the formal read goes in with the radiologist, just to make sure that all the i's are dotted and the T's are crossed."

I mentioned this a few times before, but I should say that APPs, especially the APPs in our neuroendocrine program play a really important role. And even if patients who are a year or two years out aren't physically seeing me and are seeing my APP, I make it a point to look physically at every single scan, review every single record, and talk with my team about every single patient, and make myself physically available. I think the advantage of having an APP as part of the team is that while I am in clinic one day a week, my APP is in clinic three days a week, and so giving patients a little bit more flexibility to come in a couple of extra days during the week can make a really big difference for someone who's living their life.

Lisa Yen 45:23
I'm glad you mentioned that, because they may be expecting to see you and then they're seeing an **APP, a PA or a nurse practitioner**. In essence, you *are* seeing them. You've reviewed their scans. It's not a substitute for seeing you. They're part of your team.

Dr. Seth Concors 45:34
Yes, and certainly if I'm in the clinic, I love nothing more than walking by, waving, asking them about their kids, their family or their grandkids. Or if they're being seen in a day where I happen to be in the operating room, then if there's any question whatsoever, closing the loop, either on a video visit or over the telephone, if they happen to be far away.

Lisa Yen 45:50
So, continuing that relationship. That can be helpful, because then you're also able to continue operations and do other things.

What's your perspective on second opinions? I think sometimes people are nervous about second opinions, and like say they come and see you, but no offense towards you, but they are just wondering and have other questions. Specifically for neuroendocrine cancer, what is your perspective on getting second opinions?

Dr. Seth Concors 46:13
I am a huge fan of second opinions. The minute patients bring enough or even if I'm sensing that's something they want to bring up but don't want to bring up because of that embarrassment that you're referencing, I encourage it. I think that the relationship between a patient and their provider has to be the right relationship, and if for whatever reason, whether it be distance from home, whether it be relationship with the healthcare system, whether it be economics, which unfortunately enters into a lot of decision making. If someone is more comfortable with another surgeon, and I think that other surgeon or

medical oncologist is offering the same high-quality care that I think I can offer, then I think it's a really good idea. I would never discourage someone. In fact, I've encouraged a fair number of patients and giving them a list of names of other people to talk to.

Lisa Yen 46:56
You'll even go the next step and suggest people for second opinions.

Dr. Seth Concors 46:59
The neuroendocrine community, in and of itself, especially the surgeons, is a very small, tight, knit community. Most of us know each other. Most of us talk to each other on a regular basis, see each other three or four times a year, meetings. And I don't think putting words in the mouth of other surgeons, I don't think anyone would be upset about any one of us seeing or taking care of our patients, if that was the right thing for them.

Lisa Yen 47:19
And thank you for saying that to really empower patients, to give them permission to do the exploration and work to build their confidence in not just a surgeon, but in having surgery.

Dr. Seth Concors 47:31
Yeah, another common thing that I find myself saying in clinic often is that "I don't get paid to do surgery. I get paid to help you make the right decision." I love doing surgery. I love recommending surgery. I love doing it. Obviously, I have a lot of passion for it, and I've spent a lot of years learning how to do this and mastering this, but my job is to help you and your family make the right decision. And if surgery here or surgery elsewhere happens to be part of that decision, I would love to be part of the team taking care of you. But if it doesn't, I'm also happy to help take care of you in any way that I can.

Lisa Yen 48:01
Thank you for saying that. I think people really need to hear that and feel that permission. And to know that you're in their corner, whatever that means and however that looks.

Dr. Seth Concors
Yeah.

Lisa Yen 48:10
Another big concern that people worry about, especially with having surgery, is **carcinoid crisis**, and they hear that this is a thing. How do you address and manage those concerns about carcinoid crisis?

Dr. Seth Concors 48:23

Great question. Obviously, it's a concern that at the time of surgery, these tumors that may or may not be making hormone especially small bowel neuroendocrine tumor that's spread to the liver can cause them strain in the heart and lungs while they're asleep in the operating room. There are a couple of important things that I think are relevant to that. For one, I start out by getting echocardiograms on almost any patient with metastatic neuroendocrine tumor I'm going to the operating room with. And that doesn't cross carcinoid syndrome off the list, but certainly we start thinking more about the effects of carcinoid syndrome on the heart, and I really want to cross that T off before I go to the operating room.

In addition, if I have any concern that patient's tumors are making hormone, I'll check plasma or blood levels of the hormone before going to the operating room, which again, can help me kind of best understand and be prepared if that's something we worry about. And I think working with expert anesthesia teams. The anesthesiologists are just as expert as the surgeons and medical oncologists at these institutions. You may go to a place where an anesthesiologist has only read about neuroendocrine tumors and carcinoid in a textbook and is preparing for surgery in a much different way than an anesthesiologist at a place like Emory, who sees multiple of these in a week, and I think that level of preparation and expertise protect someone from a problem like carcinoid syndrome. There's obviously some newer data that's been published that shows effectively how to manage it, and certainly if my anesthesia colleagues have a little bit less experience, which hasn't happened, but if they would, I would just point them in the direction of that. It's really the expert team at the institution that thinks about it and takes care of it.

Lisa Yen 49:55
So having a team-based approach, again, people who really understand neuroendocrine. You mentioned that there's been data that's been published, and there's some patients who really feel strongly and want to advocate for the use of octreotide. They've heard that this is really important. They want to talk to their anesthesiologists about it before surgery. Can you talk about octreotide and how that's used or not used, and what the role is?

Dr. Seth Concors 50:19
Yeah, you know, it's interesting. When I started in residency and training, I distinctly remember being quizzed about this as a resident. What's that bag hanging up by the anesthesiologist? That's octreotide. Why are we doing this? But I think, really. In the last several years that's fallen by the wayside, and the most effective treatment are medications to support someone's heart and lungs. **Vasopressors**. These are medications that help support blood pressure, heart rate while you're asleep. And there's some studies that show essentially, when people are getting octreotide and they're seeing better blood pressure, they're simultaneously getting these very common medications that are actively treating blood pressure and heart rate. So that we think now more so that's the most important part of treating someone while they're asleep in the operating room.

To the bigger picture question, I typically don't stop the lanreotide If I'm taking somebody to the operating room who's on it, I don't tell them, hey, stop your dose beforehand. We're going to hold it for a little while. And so, I usually time surgery somewhere in the middle. So, you'll get your dose, I'll do your surgery, you'll get your next dose when you're ready.

Lisa Yen 51:14
So, you're saying that that practice of hanging the bag of octreotide and then continuing after surgery that's fallen by the wayside.

Dr. Seth Concors 51:21
Yeah, I can't say that I've seen that in the last couple of years.

Lisa Yen 51:23
And then the medications you're talking about, the medications that keep blood pressures up. Is this something now that patients should be quizzing their anesthesiologists about? Is this a new practice? Is this a change? Is this something that they need to discuss with their anesthesiologist?

Dr. Seth Concors 51:37
No. I mean, quite honestly, it's what the anesthesiologists have been doing all along, and we're just now recognizing that's the effective treatment for it. I don't think any anesthesiologist would be upset to be quizzed about it. Say, “Hey, listen, I have neuroendocrine tumor. Carcinoid [crisis] is on the front of my mind. What are you going to do to help take care of me while I'm asleep in the operating room?” And that's why meeting your anesthesiologist the day of surgery and asking those questions are important. And every anesthesiologist that I work with, I think would be excited if their patient asked them that degree of nuance about their care.

Lisa Yen 52:05
And understandably so. I mean, there are people in the community who've had had very serious carcinoid crisis. They're really concerned about this, especially undergoing a major procedure or surgery, and they want to make sure that they're being cared for when they're asleep. So how do they have that discussion if now it's not about octreotide?

Dr. Seth Concors 52:23
It's just letting the team that's taken care of you know that it's a concern. I think that's another value of a high-volume center, is having anesthesiologists who know the diseases they're taking care of and saying, Listen, I have neuroendocrine tumors. What's your expertise taking care of people who are asleep, who have neuroendocrine tumors, who are getting surgery on the neuroendocrine tumors? What's your experience like with changes in my blood pressure while I'm asleep? What strategies are you going to use to watch my heart and my lungs while I'm asleep? And simply asking those questions to the

anesthesiologist shows them that you're an advocate for your care, and I think are the key questions that let anesthesiologists know what to think about.

Lisa Yen 52:59
As you can see, and you see this every day and we see it in our support groups, patients are anxious about surgery, and they also often wonder how they themselves can best prepare physically, emotionally, mentally for surgery. What guidance do you typically offer?

Dr. Seth Concors 53:13
It's a massively important topic. I tell all of my patients that training for surgery is like training for a marathon. Their job is from the time that I meet them and the time we decide to do surgery, up until surgery. And then my marathon is while they're asleep in the operating room.

And so, what is training for the marathon like? Well, it's meeting with a nutritionist and mapping out a high-quality nutrition plan to both optimize your weight and protein intake in the weeks and months leading up to surgery. And so, meeting with an expert nutritionist, and we have one of the best nutritionists that I've ever worked with in our clinic who develops longitudinal relationships and will check in with people. And I think most major medical centers offer that in some way, shape or form. So even asking, "Hey, can I meet with a nutritionist to talk about getting myself ready for surgery?" The other aspects, you know, obviously minimizing things like smoking and getting you as healthy as you can be, critically important.

And then physical strength we have, and many centers have adapted a model of **prehabilitation**, so not rehabilitating people after surgery, but prehabilitating them, building up your muscle and strength in the days to weeks ahead of surgery. And I commonly get asked, What's the value of physical therapy for a week or two? How is that actually going to help? And seeing people before they go to prehab, just working with a physical therapist and after, I can tell you even two weeks, and the data would support this, even two weeks of light aerobic exercise and weightlifting can make a meaningful difference in recovery after surgery for a variety of reasons. Sometimes patients can't go to formal prehabilitation programs, financial constraints, time constraints. I simply tell them that your job from now until surgery is to start walking 15 minutes a day, walk on a treadmill, walk outside, go upstairs, and every day increase that slightly. And if you can walk a mile and walk up a flight of stairs between now and surgery, it's again going to make a meaningful difference. And I tell them, "**Every bit of exercise they do before surgery knocks a day or two off on the recovery end**." And so, to the extent that I can, I really try to emphasize exercise. It's obviously a lot easier for me to advocate for that than for patients to do it because of everything they're going through. But from everything I've seen, it really expedites recovery. And I try to make that as easy as possible.

Lisa Yen 55:14

I think it's hard, because the focus a lot of times is on making the decision and then getting to surgery. And then okay, I'm going to be asleep, and there's so much anxiety around the decision making itself, and sometimes we forget all of the other things that we can do. I love this idea of prehabilitation and being able to work on the strength and endurance beforehand.

I can say, personally, my husband has had two major surgeries for neuroendocrine cancer, and the first one, we did not have access to some sort of prehab, but he didn't go into it with the strength and endurance and walking a couple miles a day. And his recovery was much different than the second surgery, where he was walking several miles a day before surgery, where his surgeon's like, your job is to get out there and walk several miles a day, and you did it, and the recovery was really different. The pain control and the endurance and everything afterwards was really quite different.

Dr. Seth Concors 56:03
And one other thing that I think is important to say is that oftentimes people feel like there's a rush to the operating room. You know, I've got this problem. I have to be in the operating room tomorrow. And for this disease, especially when you're talking about surgery in the metastatic setting, the decision to operate is more measured, and we have months of time to plan these things. And so I really would advocate for patients to say, “Hey, listen, I'm not feeling as strong as I feel like I need to be. Do you think it's safe if we wait another month or two and I build up my strength?” And it's a complex decision, but oftentimes it's the right decision to say, “Hey, let me wait a couple more weeks. Let me hit the gym a little bit. I don't feel quite strong enough.” And I’ve definitely delayed people a couple of weeks. And I say delay, not because there's actual delay in their medical care, but just pushing back surgery. And it hasn't changed what I've had to do in the operating room, and it's made bountiful difference. And so I do want to empower people to say, “Hey, listen, I'm just not feeling 100% there yet. Can I have a few more weeks to get stronger?”

Lisa Yen 56:56
Another way that neuroendocrine cancers differ from other cancers who are waiting a couple weeks to get stronger doesn't necessarily change the outcome.

Dr. Seth Concors 57:05
Yeah, absolutely. And I think there's some scenarios where maybe it makes a little bit less sense. And so obviously I would leave that up to patients and their providers. But if there's an opportunity to get stronger, I strongly advocate people do that.

Lisa Yen 57:17
How you go into it can affect how you come out of it. And if I might squeeze in one last question, what if any clinical trials are going on in your field, in surgery, specifically things related to surgery and neuroendocrine cancer?.

Dr. Seth Concors 57:32
Yes, so right now, a large number of centers throughout the country are enrolling in an adjuvant study, so getting surgery, specifically in pancreatic neuroendocrine tumors, and using combination of medications to see if we can decrease the recurrence rate. It's a **SWOG**, a cooperative group trial using **capecitabine and temozolomide** to decrease the recurrence rate of pancreatic neuroendocrine tumor. So that's one large trial that I think is pretty relevant. And you may hear that about that from one of your providers.

I think one other trial, not neuroendocrine specific, but often comes up, especially in the pancreatic neuroendocrine tumor space, is it's recently enrolling trial using **lanreotide**, the medication you may be familiar with, to decrease the rate of complication after pancreatic surgery. So your surgeon might talk to you about a **randomized trial**, so comparing using a placebo versus a single dose of this medication to decrease the most common complication after pancreatic surgery.

And so that may be something you'll hear about. I think, as your listenership is probably aware, doing trials, especially surgical trials, in the neuroendocrine space is incredibly challenging. It is a large part of my academic career. It's something that I and several other neuroendocrine surgeons are interested in increasing. I think we definitely are doing work in the quality of life and survivorship space on a prospective basis of surveys. You may be asked to do a lot of surveys about how has this cancer impacted your life. I do think that in the near future, you will hear about more trials in the neuroendocrine space, especially for patients who can undergo surgery.

Lisa Yen 58:59
And hopefully then we'll have more information and answers to some of these questions, and work towards what you're aiming for, you're talking about, hopefully it doesn't come back, and that you can buy more time and have better quality of life all these things that you have been working for and you continue to.

Dr. Seth Concors 59:15
Absolutely. That’s the goal.

Lisa Yen 59:17
That's the goal. Thank you so much, Dr Concors. Thank you for joining us today and helping us demystify the role of surgical oncology and neuroendocrine cancer care. Your insights into multidisciplinary collaboration, thoughtful surgical decision making and patient centered care, they're incredibly valuable for patients and caregivers navigating these complex decisions. And to our listeners, we hope this conversation helped clarify when and how surgery falls into neuroendocrine cancer treatment and empowered you to make informed questions as part of your care. And as always, we encourage you to discuss your individual situation with your medical team. Thank you so much again,

Dr Concors. We really appreciate you and all your hard work and dedication to the neuroendocrine cancer community.

Dr. Seth Concors
You're welcome. It's really been a pleasure.

Lisa Yen
Thanks for listening to the Neuroendocrine Cancer Foundation podcast. We want to thank our podcast supporters Novartis, Exelixis, Lantheus, ITM, Crinetics, and Boehringer Ingelheim.

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