Melanie Cole (Host): Welcome. Today, we’re talking about Penn’s Esophageal Cancer and Surgery Program. And my guest in this panel discussion today are Dr. Noel Williams, he’s a Rhodes Harrington Professor in Surgery and an Attending Surgeon at the Hospital of the University of Pennsylvania in the Department of GI Surgery.

And Dr. John Kucharczuk. He’s the Chief in the Division of Thoracic Surgery and an Associate Professor of Surgery at the Hospital of the University of Pennsylvania. Welcome gentlemen. I’m so glad to have you with us today. Dr. Kucharczuk, I’d like to start with you. Tell us a little bit about esophageal cancer and what are some of the specific risk factors that other providers should be looking to.

John Kucharczuk, MD (Guest): Yes, in the current era, the vast majority of esophageal cancers are in patients who have reflux and oftentimes they are what are called adenocarcinomas. These occur in people who are overweight, people that experience daily reflux, people that have been treated for reflux in the past. There is also some association between esophageal cancers and exposures and lifestyles that includes cigarette smoking and alcohol intake. So, I think as a primary care provider, the most important thing to think about is screening those patients who have recurrent reflux over a long period of time.

Host: So, along those lines, Dr. Kucharczuk, where do you stand as to implementing screening programs for esophageal cancer?

Dr. Kucharczuk: In the United States, the incidence or number of people with esophageal cancer is growing quickly. But many countries in Asia actually have screening programs both for esophageal and gastric cancers. So, at the current time, we have a low threshold for doing endoscopy on patients who have symptoms but there is no screening recommendation.

Noel Williams, MD (Guest): Just to follow up on that, if you were to take every single patient of the demographic of patients, we see who have reflux or GERD; you would be doing endoscopies on thousands of patients. So, we’ve not been able yet to bring it down into a system where you may have
patients with symptoms for a certain amount of time or the severity before you would actually scope everybody. So, we don’t have the criteria field for screening.

**Host:** Dr. Williams, as there are several new advances in surgical treatment, minimally invasive treatments; share some of the latest treatment options that Penn Medicine offers. Tell us about your program and the physician services.

**Dr. Williams:** What we have in place here is a multidisciplinary clinic where we see patients jointly with surgery, with radiation oncology and with medical oncology. Dr. Kucharczuk are a thoracic surgeon and a gastrointestinal surgeon respectively and we see patients as a team. The patients come to us either before or after they have had preoperative chemoradiation therapy. Each person sees the patient. We talk to them individually and also as a team to explain the surgery that we are going to do. What we try to do is do the majority of the cases in a minimally invasive fashion meaning small incisions in the abdominal portion of the operation.

And typically, we do a trans hiatal esophagectomy which means an abdominal portion of the operation and a small incision in the left side of the neck. And the advantage and the beauty of what we do is that we do it as a team, so, we start – I start the abdominal portion of the operation laparoscopically. When I reach a certain stage of that operation, Dr. Kucharczuk starts in the neck and we then do the last portion of the operation in a combined fashion.

**Dr. Kucharczuk:** I would add that because esophageal cancer can be a complex disease; it does require in-depth thinking about what the steps are going to be to come up with a treatment plan and who is going to be involved and how those steps are going to be arranged. And in the way that we see patients; I think having input from a lot of different specialties and disciplines really is a big benefit for the patient.

**Host:** Dr. Kucharczuk, as some of the after effects of this type of cancer treatment can affect the daily lives of patients, and due to the sensitivity and intricate nature of this cancer; are there some technical considerations you’d like other providers to know about?

**Dr. Kucharczuk:** Sure. I think that there are a couple of things that we really need to set out and be very forthright with our patients and their families, both for nourishment and pleasure. And part of our goal is to try to restore both of those functions as best as possible. Obviously, the nourishment part of it is critical and if you don’t address the nourishment part early on; you don’t have a good outcome. But as you pointed out, there is a lot to the social benefits of eating together, of going out. It’s a very social undertaking and so we try to restore eating function as close as possible.

That’s one of the reasons of the four or five different operations we can perform for esophageal cancer; the operation that Dr. Williams spoke about where we put the connection up in the neck, we
like the best. We think that probably gives you the best functional outcome. So, the straighter more narrower tubes that are higher up in the body, tend to empty better, patients have a better sense of fulfillment with eating and they are still able to maintain their nourishment and meet their requirements to maintain their weight. And so that’s very important.

Host: Dr. Kucharczuk, how have your outcomes been?

Dr. Kucharczuk: Our outcomes generally are very good. We are a center that’s easily doing 40 of these operations a year and because these operations are complex and oftentimes cross multiple body cavities; they are fraught with all kinds of potential complications. But if you have a team that is very experienced; you can smooth out the roller coaster of complications that people oftentimes have in the immediate postoperative period.

And then you also have long-term outcomes. And what we know about esophageal cancer overall, when you look at the statistics it is potentially a very deadly cancer that most people don’t survive. That being said, if you select patients correctly and you get them the right therapy, you can really start to get appreciable long-term survival rates in patients across several stages, not just early stages but also patients who are treated with multimodality therapy and that means they have preoperative chemo and radiation therapy with nutritional support followed by surgery and then go on for a good long term cancer outcome. So, I think to specifically answer your question, I think both our short and long-term outcomes are very good.

Host: Dr. Kucharczuk, if you were to look forward to the next ten years in the field; what do you feel will be some of the most important areas of research?

Dr. Kucharczuk: I think the most exciting thing from my perspective has to do with some of the molecular and genetic profiling of the tumors. There are several tumors that we now find across different body parts that express molecular targets that we can take advantage of. The kind of most recent one in esophageal cancer has been something called HER2/neu. For listeners who know a little bit about breast cancer, that is something that all breast cancers are tested for and if you express that on your breast cancer, there is a drug called Herceptin which you can give which will improve the outcome.

And it’s fascinating that just in the last several years, we figured out that a percentage of esophageal cancers do express that and there are some ongoing clinical trials to determine how that drug should be introduced into the overall care pattern. My suspicion is, as we test more tumors and get more information; we’ll probably see a lot of this crossover and we may see that some of those molecular treatments really change the overall outcome especially in later stage disease, but they will probably be incorporated into earlier stage disease as well.
**Dr. Williams:** And if I could just add to that also. Hopefully in the future in relation to esophageal cancer is something called a liquid diagnosis. In other words, you could potentially take a blood test from a patient rather than a screening with an endoscopy, and lead to an early diagnosis and therefore a higher likelihood of cure. Especially since Dr. Kucharczuk point out earlier, is that it is on the increase because a lot of patients have reflux, and this predisposes patients to potentially cancer down the line.

**Dr. Kucharczuk:** In advanced stage lung cancer, checking peripheral blood for circulating DNA is standard, as things mature, as the science matures, some of these techniques will be able to be applied to other cancers and in our case hopefully esophageal cancer.

**Host:** So interesting. Absolutely fascinating. What an exciting time to be in this field. Dr. Williams, tell other physicians what you’d like them to know about esophageal cancer, your program at Penn Medicine, when you feel it’s important to refer and what they can expect from your team when they do refer.

**Dr. Williams:** As Dr. Kucharczuk pointed out we are a center that does a significant number of these. On average, about a case a week or two. What you do not want to do is to go to or refer a patient to a center where they are doing one case a month or once case every six months.

The advantage we have is we have our own team, not just as two surgeons and their staff in the operating room but the anesthesia portion. There’s a specialist anesthesiologist who has an interest in these patients and the type of anesthesia required.

So, that’s really very important from a standpoint of the success of the actual operation. And then the other thing of significance is that the patients who come into the hospital typically stay a week. It’s a dedicated floor for postop recovery of esophageal cancer patients and also lung cancer patients having thoracic surgery.

In terms of referral, I think it’s really important as soon as you are suspicious of the diagnosis for example if a patient has weightloss, a patient has difficulty swallowing with solids. Don’t wait for a period of time before getting an endoscopy or an upper GI x-ray. The earlier the diagnosis, the better, and as soon as the diagnosis is made, have the patient go to the appropriate specialist like a gastroenterologist, get an EGD which is a scope, have an ultrasound to assess the tumor and then as soon as possible thereafter get the patient to see the multidisciplinary program like we have in place for surgery in the future, chemotherapy and radiation.

**Host:** Dr. Kucharczuk, last word to you. What would you like other providers to take away from this segment, the important take home messages about your program?
**Dr. Kucharczuk:** So, I think first of all, if you have or come across a patient with esophageal cancer, I’d be encouraging to them. Sometimes if they will start looking on the internet or looking at some of the medical literature, they’ll really be depressed. And that’s not necessarily true. There are lots of cases where we can have good outcomes. And then secondly, I think that referral – early referral is always better.

We have a very streamlined pathway. We get all of the required studies that are needed in order to make the appropriate decisions for treatment planning in for arranging the treatment segments in the appropriate manner. We are also very open about it so, if people want to call us, we can tell us exactly how we do it and some folks like to get some of the workup closer to home and then come once everything is done.

Other people and their physicians are very comfortable just having them come here, spending a day with us, seeing everybody they need to see and then coming away with a well-documented plan on how to move forward. So, I’m fairly flexible with either approach. We make arrangements and we reach out and try to develop relationships with people in your community that can provide that long-term follow up.

**Dr. Williams:** And just one other point, also the access to see us in these clinics there is no wait. If you call on a Monday, you can come in on a Tuesday as an extra patient. You call on Wednesday or Thursday, we see you the following week on the Tuesday. And the other thing to mention is that in our clinic, we do have nurses and nurse practitioners who are expert in the area of diagnosing, helping to diagnose, what tests to order and organizing the pre- and post-op workup for these patients. So, it’s very comprehensive from that standpoint with an entire team of people who are very dedicated and knowledgeable in this area.

**Host:** Well it’s so important. Thank you, gentlemen, so much. It is a comprehensive multidisciplinary approach. Thank you for joining us again. That’s wraps up this episode from the experts at Penn Medicine. To refer your patient to Drs. Williams or Kucharczuk at Penn Medicine; please visit our website at [www.pennmedicine.org/refer](http://www.pennmedicine.org/refer) or you can call 877-937-PENN for more information and to get connected with one of our providers.