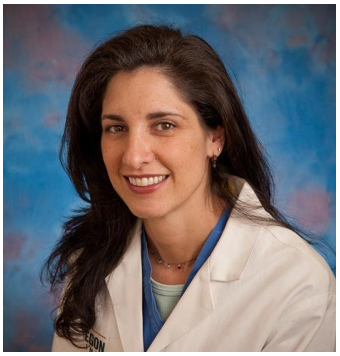
GE Junction: Q & A



Oncology Issues recently talked with Christy Dunst MD, FACS, from Providence Cancer Center in Oregon about the rising incidence of and treatments for gastroesophageal junction adenocarcinoma.

OI. *What factors explain the increasing incidence of gastro-esophageal (GE) junction adenocarcinomas in the U.S.?*

Dr. Dunst. The pathophysiology of the GE junction adenocarcinoma is quite complex. It has been argued through the decades whether GE junction tumors are esophageal or gastric in nature. It's a pretty important distinction because the risk factors for gastric cancer are quite different from risk factors for esophageal cancers, as well as the treatments that have evolved over the years. With improved understanding we've been able to really separate the GE junction or proximal gastric tumors from distal gastric tumors. And now the official guidelines state that gastroesophageal junction tumors—adenocarcinomas—should be classified as esophageal, with rare exception. So now our treatments can be streamlined, and we can focus more on the pathophysiology of esophageal cancer as it applies to gastroesophageal junction tumors.

The risk factors for these tumors are pretty clear. These cancers are more common in older, Caucasian men who have had long-standing reflux disease or Barrett's esophagus. Smoking and obesity have recently become more solidified as risk factors. Alcohol and dietary factors are not as strong risk factors, but most of us suspect that there might be something there as well. As far as why is it increasing, the only thing that we can really identify is that some of those risk factors themselves have been increasing, specifically incidence of Barrett's esophagus and obesity. We're not sure exactly what's driving the increased risk of Barrett's esophagus, but it's definitely out there.

We're seeing increased risk in men and women, and we're seeing the cancer in younger people. The incidence of this cancer is growing out of control; the data points are continuing to escalate. I think it is becoming more significant. It is traditionally thought of as an older, Caucasian male GERD (gastroesophageal reflux disease) patient—that's the definite stereotype—but we are definitely seeing it in more women as well.

OI. *Why is it important to classify GE junction adenocarcinomas?*

Dr. Dunst. The treatments differ depending on whether the tumor is coming from the stomach or coming from the esophagus. For many years the only treatment for either cancer was surgery—you either take out the esophagus or the stomach, depending on which tumor you think that it is.

Nowadays we have defined chemotherapeutic and radiation regimens that are effective adjuvant therapies to surgery, and they are a little bit different. The current standard of care indicates that for gastric cancer we should be giving patients perioperative adjuvant chemotherapy—chemotherapy before and after surgery—and the surgery should be a gastrectomy with an extended lymph node dissection in the abdomen. Whereas the current standard of care for advanced esophageal disease that is resectable is to give concurrent chemoradiation before surgery, followed by an esophajectomy. Most GE junction tumors are considered esophageal. In rare exceptions, advanced tumors would be treated with neo-adjuvant chemo-radiation and surgery. But occasionally you will find one that, for various and anatomic reasons, is a gastric primary, and in these cases the better option would be to treat as a gastric primary. The big focus is on treating the esophagus.

OI. *Which tests are usually necessary to help you stage disease and identify the type of tumor you're dealing with?*

Dr. Dunst. The standard tests include CT (computed tomography) scan of the chest and abdomen, and of course endoscopy with biopsy to see where the tumor is and to define the biology of the disease—whether or not it's an adenocarcinoma or squamous cell carincoma. After you've made the diagnosis, the next standard of care procedure would be an endoscopic ultrasound to determine the depth of the tumor and to get more information about the likelihood of lymph node involvement. Most clinicians will also use a PET (positron emission tomography) scan to rule out distant metastatic disease. In my practice I use all of those—endoscopy, endoscopic ultrasound, CT scan, and PET scan.

In the ones that are questionable for gastric cancer, I will do a diagnostic laparoscopy. Gastric cancer has a very high association with occult carcinomatosis, or metastatic disease to the peritoneal lining, which cannot be detected in all cases by any of the testing modalities. If there's a question that it's gastric, I'll do a diagnostic laparoscopy. If it's pretty clearly GE junction or proximal to that, meaning distal esophagus—the incidence of carcinomatatosis is only 1 or 2 percent—I don't add that on.

OI. *What are the best treatment options for patients?*

Dr. Dunst. The treatment options very much depend on the stage, and that's why we use so many diagnostic modalities to figure it out. If the patient has a mucosally-based tumor then often we can treat that endoscopically, meaning using a flexible endoscopic approach through the mouth, with no major surgery at all. And then some patients don't need chemotherapy and radiation. They have small tumors that are just big enough to contraindicate endoscopic therapy. They're pretty small and there's no lymph node involvement, and these can be treated with esophajectomy alone. In our practice we are pretty conservative.

I think the trend across the United States is that most patients get neo-adjuvant chemoradiation. And the reason is because the diagnostic modalities that determine whether or not there are lymph nodes involved are not perfect. But over the years we've developed many endoscopic therapies for early cancer that have saved a lot of lives and maintained quality of life because patients have been able to avoid chemoradiation or avoid surgery. So the staging is important.

OI. *Which are the most accurate, appropriate guidelines for practice in this area?*

Dr. Dunst. I think the current version of the NCCN (National Comprehensive Cancer Network) guidelines is good. It's taken a few years of debate, but it's a good place to start. But—this is sort of contentious—there are no clear guidelines as to who should be screened for esophageal cancer, in particular Barrett's.

So my personal recommendation is that if you are having severe reflux requiring daily medication for more than 10 years, you should get scoped. In my opinion, that's pretty conservative, but it is a little bit contentious as far as who should get screened. But you know the best way we're going to get a handle on this disease, until we understand exactly what's causing it, is to catch it early.

OI. *Who are the multidisciplinary team members that you really like to see involved in the diagnosis and treatment of patients with GEJ cancers?*

Dr. Dunst. The endoscopist who is performing the esophageal ultrasound is imperative, so that we can communicate the final stage of the patient. With anything beyond a mucosally-based tumor, we involve the oncologist and radiation oncologist to determine the final treatment plan—whether or not patients are going to be a candidate for all the therapies, whether or not they might be a candidate for trials.

I would really like to see a clinical pathways coordinator, but we have so many patients that are referred from outside, that they don't necessarily get all of their care here at Providence. It's very common to coordinate patient chemotherapy and radiation treatment with providers that are a few hours away. So even though I would love to have a single person that could make sure everything is going smoothly throughout the entire process, we haven't been able to make that work out just because of the nature of referrals. But the support team members that are in each location have been very helpful with patients.

OI. *What can community cancer programs do to support care coordination?*

Dr. Dunst. We have developed a pretty good team approach here at Providence with all the key people—the surgeon, the gastroenterologist, the oncologist, and the radiation oncologist. Regardless of whether the patient is going to be treated by all of us or not, we have a very open line of communication to discuss various treatment options. It's not uncommon that we will actually discuss a patient with the intent of giving our recommendation to the referring physician so they can then follow the advice from the cancer program.

That approach has been really appreciated by a lot of people in the community. When you're in a smaller town, and you are the oncologist giving treatments to everyone, for all kinds of different cancers, it's nice to have the backup of the cancer program and the specialists. My team is focused on esophageal and gastric cancer, and so we make sure that we are up to date on all the latest therapies and trial options and try to communicate that to community providers as needed. I think everybody's really appreciative, and we've been able to establish great relationships with many providers that we've now worked with for many years.

All of my office staff are critical. We have nurses that are available to answer simple questions, and we have schedulers that are familiar with the specific needs of patients with these cancers. It's very complicated because you need to coordinate the timing of treatment. So in our practice we set patients up for radiation-chemotherapy, and then I like to re-stage them four weeks after their chemoradiation therapy is completed. And if that's okay, we'll get their cardiopulmonary testing for surgery done the following week. Then I will see them in the office for a preoperative visit, ideally with surgery scheduled six to eight weeks after the completion of their chemoradiation therapy. That's a lot of coordination to make sure that the patients don't get lost in the shuffle.

So instead of having an official care coordinator, I have my office staff who are amazing. I have the schedulers and the nurses who follow the patients through and make sure that they're getting taken care of. They're essential. Especially after esophageal surgery, esophajectomy in particular, there are some unique issues with swallowing and other various side effects. Patients usually need a lot of support. They have feeding tubes that need to be managed, and so our nurses and our office staff help with that as well.

OI. *What is the prognosis for patients who have this kind of cancer?*

Dr. Dunst. It depends on the stage. Most of the time when we're talking about this cancer, we're finding it at an advanced stage, and the prognosis depends on the stage. Stage 3s patients have a long-term survival rate of about 25 to 30 percent. We are always trying to improve this survival rate. We would like to get it higher. But if you have a Stage 2 patient, the cure rate actually is substantially higher. Stage 1s and 2s patients can have as high as a 75 percent cure rate. Early Stage 1s patients are close to a 97 percent cure rate. So, survival is really impacted by patient stage and if we can catch the disease earlier, which is what we're trying to do so that we can really impact the disease. Unfortunately, a lot of people still present at a Stage 3.

OI. *What do you see as the most promising clinical trials in this area at the moment?*

Dr. Dunst. I think a lot of the immunotherapy trials across different cancers are the most exciting, but for the most part they're early. Right now, we are focusing on enrolling in a few trials. One is a PET scan-directed combined modality trial at re-staging patients in the middle of their chemoradiation therapy to decide if the treatment is working. If it is working, then we'll keep going. If it isn't, we can alter their treatment.

We also have been looking at herceptin-receptor positive patients. There's a lot of data in breast cancer to suggest that tumors that express herceptin-receptors will respond very favorably to trastuzumab. There is a trial currently for herceptin-receptor positive patients to receive standard chemoradiation therapy with or without the drugs.

Then we're working on an immunotherapy trial for advanced gastric and GE junction tumors for patients who are not surgical candidates—either their disease is advanced or metastatic or they just aren't physically suitable for surgery.

You can't enroll in every trial. We try to limit to the ones we really believe in, that make sense to our team based on what we know. And so I'm pretty excited—all three of those trials are pretty good I think.

OI. *What do you see as the "need to know" information about diagnostic and procedure coding so that clinicians can report and sequence treatment across the patient trajectory?*

Dr. Dunst. I think that your documentation has to be correct. With every encounter you have with a patient, you have to document the stage to the best of your knowledge, so that everyone knows what the stage is. And then the procedural codes are based on location of tumors; they're pretty straight forward. When you are doing research, if you're doing epidemiology or large database research, it's important that you have the procedural codes and the pathology diagnostic codes correct and as detailed as possible. I can only see ICD-10 helping in that area.

We participate in the national databases, so we try and make sure our codes are as detailed as possible. One frustration is that the codes of some of the national databases don't differentiate between some of the procedures. That's challenging because that data is not useful for surgical outcomes. Hopefully the oncology community will become more detail-oriented. It has to do with some procedures not having codes and so they're not captured in national databases. Nationwide we're still working on that issue, fixing it and making it better.