

# Ask ACCC's Community Resource Centers: *Gastric Cancer*

According to the National Cancer Institute, an estimated 22,220 cases of gastric cancer will be diagnosed in the U.S. in 2014 and about half of that number will die from this devastating disease. Despite an overall decline in the incidence of gastric cancer in the past few decades, it remains difficult to cure since most patients have advanced disease on presentation. The overall five-year survival rate for gastric cancer hovers around 30 percent.<sup>1</sup> These numbers reflect the complexity of treating this disease and thus the need for a multidisciplinary team approach to ensure the greatest chance for long-term survival. According to Martin McCarter, MD, professor of Surgery at the University of Colorado School of Medicine, Surgical Program, Director for the Esophageal and Gastric Multidisciplinary Clinic at the University of Colorado Cancer Center (UCH)—Colorado's only NCI-designated cancer center—this program brings together this kind of specialized expertise for the community at large.

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## **Staging is Key**

Accurate and timely staging is critical in determining the appropriate approach to treatment for gastric cancer. Following the initial endoscopic evaluation and biopsy confirmation for the presence of cancer, computed tomography (CT) is performed to evaluate for evidence of metastatic disease. In accordance with the National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology for Gastric Cancer, a PET-CT may be performed to rule out occult metastatic disease in suspected advanced cancers.<sup>2</sup> PET-CT combines the metabolic information using FDG (fluorodeoxyglucose) as a tracer from PET scans with the anatomic images from CT to provide increased detection of the involvement of lymph nodes and other potential metastatic sites.

Patients without evidence of metastatic disease on imaging should consider an endoscopic ultrasound (EUS). This is a critical part of the staging work-up for determining the depth of tumor invasion and thus treatment selection. In addition to the depth of tumor invasion (T-stage), EUS can detect the presence of lymph node involvement (N-assessment) and any other signs of distant spread (M-stage) in the surrounding organs. Fine needle aspiration (FNA) during EUS adds to the diagnostic accuracy of determining the N-stage. Patients found to have pre-cancerous lesions or very

superficial disease that are limited to the submucosa may be eligible for endoscopic treatment with endoscopic mucosal resection (EMR) or endoscopic submucosal dissection (ESD).<sup>3</sup> Pathology review is an important part of the process to ensure accurate staging as studies have suggested a change in the final diagnosis which may affect up to 25 percent of patients when reviewed by expert gastrointestinal pathologists.

## **Other Treatment Options**

Perioperative chemotherapy is considered for those patients with tumors that invade beyond the submucosa and into the muscularis propria without sign of metastatic disease. This recommendation is driven by the results of the MAGIC trial, which showed an overall improvement in 5-year survival from 23 to 36 percent in those patients who underwent chemotherapy before and after surgery. Patients were randomly assigned to surgery alone versus surgery plus perioperative chemotherapy (3 cycles both pre-operatively and postoperatively of epirubicin, cisplatin, and infusional 5-fluorouracil). The combination of perioperative chemotherapy with surgical resection offers patients the best chance for cure.<sup>4</sup>


Radiation therapy may be used in certain situations, pre-operatively for gastric cancers that involve the esophagogastric junction or post-operatively for gastric cancer patients with more advanced disease who did not receive pre-operative chemotherapy.

Studies have shown that institutions with higher surgical volumes specializing in the treatment of gastric cancer are

associated with improved patient outcomes.<sup>5</sup> While much of a patient's gastric cancer treatment may be delivered locally, it is in the patient's best interest to undergo surgery at a higher-volume cancer center. Many factors contribute to improved patient outcomes. In addition to the level of expertise and experience of specialized surgeons, a coordinated care team of nurses, nutritionists, intensivists, and dedicated physician assistants who care for these often complex patients are critical.

### Our Model

Thanks to the expertise of a dedicated physician assistant who serves as the point of contact for gastric cancer patients and referring providers, most patients seen in UCCC's weekly Esophageal and Gastric Multidisciplinary Clinic are able to receive their entire staging work-up and come away with a treatment plan in place in one or two days. The first day involves a clinic visit with imaging and EUS as indicated. The following morning, each patient's case is presented in our multidisciplinary conference where the same specialists who read the PET-CT scan and performed the EUS are a part of the patient's discussion. With the collaboration of our surgeons and oncologists, this continuity enables our gastric cancer patients to receive the highest level of coordinated care. During the same conference, patients with metastatic disease or who have progressed on first line chemotherapy may receive additional molecular analysis of their tumor to determine eligibility for potential clinical trials. Because there are factors other than staging that play into determining treatment, a social worker and oncology-certified dietitian are also present

to discuss any symptoms and social factors that may influence the approach to therapy. Patients are then seen by the appropriate specialists to discuss the treatment plan, which is then communicated to the referring providers. 

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### References

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## CASE STUDY

- In May 2013, a 69-year-old woman with newly-diagnosed gastric adenocarcinoma was referred by her local oncologist in Nebraska to our regularly scheduled weekly multidisciplinary clinic for further staging and treatment recommendations. Prior to the patient's visit, the clinic coordinator, also a physician assistant, gathered medical records and imaging for clinical review. Since the patient had already undergone initial staging with a CT and PET scan, an EUS was scheduled.
- In clinic, the patient was noted to have severe early satiety and nausea, with an associated 30-pound weight loss over the past several months. EUS was performed that afternoon, and she was found to have a 5 cm circumferential mass in the antrum extending to the pyloric channel with evidence of gastric outlet obstruction. With sonographic evidence of tumor invasion into the serosa and two abnormal lymph nodes in the gastrohepatic ligament, clinicians staged her disease as T3N1Mx.
- The patient's case was presented and all imaging was reviewed the following morning in our multidisciplinary conference. The endoscopist reviewed EUS findings and reported that further symptom management was imperative based on the findings of gastric outlet obstruction. However, taking the patient straight to surgery was not in her best interest for long-term survival.
- After multidisciplinary discussion, the team presented the patient with the option of proceeding directly to surgery to remove the tumor and relieve the obstruction versus ideally starting with upfront chemotherapy and enteral stent placement. The team discussed with the patient the benefits of neoadjuvant chemotherapy and risks of stent migration associated with a significant response to chemotherapy. The patient decided to proceed with enteral stent placement the following morning, which relieved her obstructive symptoms and allowed her to proceed with neoadjuvant chemotherapy with her local oncologist.
- Eating well and feeling better, she underwent three cycles of epirubin, oxaliplatin, and capecitabine in Nebraska. Then, four weeks following the completion of neoadjuvant treatment, she returned to our clinic for follow-up imaging and re-evaluation. The scan showed no evidence of new disease and the patient underwent a distal gastrectomy with curative intent. She recovered and received additional adjuvant therapy with her local oncologist closer to home.
- This case illustrates how a multidisciplinary evaluation with a team of specialists provides patients with options that might not be offered elsewhere and can ultimately improve long-term survival.