Case Scenario 1

July 10, 2010

A 67-year-old male with squamous cell carcinoma of the mid thoracic esophagus presents for surgical resection. The patient has completed preoperative chemoradiation. This consisted of 4 cycles of 5-fu and cisplatin with concurrent IMRT radiation (50 Gy). On admission no specific clinical findings were noted. There were no abnormal findings in laboratory data.

History

The patient presented to my office in March of this year complaining of persistent dysphagia. Endoscopy revealed an elevated lesion 31–34 cm from the incisor teeth, at the left-anterior wall of the middle esophagus. Specimens taken from the tumor revealed poorly differentiated squamous cell carcinoma. EUS showed the tumor invading into the surrounding adventitia.

Radiological examination of the upper gastrointestinal tract showed an elevated lesion with uneven surface and distinct margins. Cervical and chest computed tomography (CT) images showed enlarged malignant appearing cervical, paraesophageal, paratracheal and superior mediastinal lymph nodes. A mediastinoscopy was performed and a single paraesophageal lymph node was removed and found to be positive for metastatic squamous cell carcinoma.

The patient has now completed his neoadjuvant chemoradiation and has been cleared for surgery.

Operative Report

Thoracotomy: The tumor was located mainly at the mid thoracic esophagus and direct invasion of the surrounding tissue could not be identified. A subtotal esophagectomy with lymph node dissection was performed as well as reconstruction with a gastric tube via the retromediastinal route.

Pathology:

Tumor Size: 1.6 x 1x 0.5cm
Tumor Site: Midthoracic esophagus
Margins:
    Circumferential margins: Negative
    Radial margins: Negative
Histologic Type: Squamous cell carcinoma
Histologic grade: G3: Poorly differentiated
Extension: Tumor invades submucosa

Regional lymph nodes:

One of two right deep cervical esophageal lymph nodes and one of two right subdigastric lymph nodes positive for malignancy. No indication of extracapsular extension. Four upper paraesophageal lymph nodes, two superior mediastinal and six paratracheal lymph nodes were negative for malignancy.

Tumor cells were found in the lymphatic vessels near the metastatic lymph nodes and intramural metastatic lesions.

2 of 16 positive regional lymph nodes.

Discharge Summary

The patient's recovery has been uneventful and he is able to return to his home. No further treatment is planned at this time.

Case Scenario 2

History & Physical

5/20/10 This 52-year-old white male presented with epigastric discomfort. On physical examination, the abdomen was soft and flat with neither palpable mass nor tenderness. No peripheral lymphadenopathy was observed. Endoscopic examination revealed a protruding lesion 1.5 cm in diameter with a well defined margin on the anterior wall of the gastric antrum. A biopsy sample from the lesion was not diagnosed histologically as malignant.

Double-contrast radiography showed a tumor mass 2.0 cm in diameter with a well defined border on the greater curvature of the gastric antrum. CT demonstrated a tumor mass with a distinct border on the anterior wall of the stomach. Abdominal ultrasonography (US) showed a hypoechoic tumor measuring 3.0 × 2.0 cm with an irregular margin under the gastric mucosa. CT and US showed no findings suggestive of lymph node or liver metastasis. Laboratory examination revealed an elevated CA19-9 level of 106.9 U/ml; the level of carcinoembryonic antigen (CEA) was within normal limits.

Procedure

5/20/10 Laparoscopic subtotal distal gastrectomy with regional lymph node dissection.

Pathology

5/20/10 Gross: A protuberant tumor 2 cm in diameter was observed on the anterior wall of the gastric antrum. The tumor surface was covered with apparently normal mucosa which was reddish in comparison with the surrounding mucosa. The recess found on endoscopic examination was unremarkable. The tumor was apparent on the serosa of the stomach.

Microscopic: The 2 cm tumor, papillo-tubular adenocarcinoma, infiltrates the serosa. Papillo-tubular adenocarcinoma with a reticulated gland structure involved the lamina propria mucosae, while less differentiated adenocarcinoma with abundant edematous fibrosis was observed in the submucosal layer. Lymphatic and vascular vessel infiltration was remarkable; 2 of 26 perigastric lymph nodes were malignant. Margins of resection are clear.

Final diagnosis: Papillo-tubular adenocarcinoma of the gastric antrum involving lamina propria, submucosa, and infiltrating the serosa.

Discharge Summary

5/25/10 Patient admitted for surgery. See history & physical for history of present illness. Although a histological diagnosis was not achieved before surgery, a laparoscopic subtotal distal gastrectomy with regional lymph node dissection was performed after obtaining informed consent from the patient, since

gastric cancer was highly suspected in view of the markedly elevated CA19-9 level and the irregular tumor margin demonstrated by US. Patient was discharged 5 days post-op without complication. Patient has scheduled follow-up appointment.

Follow-up

1/6/11 Patient has completed postoperative chemoradiation. Combined modality treatment consisted of 5 monthly cycles of bolus chemotherapy (5-FU and leucovorin) with external beam RT (45 Gy) concurrent with cycles 2 and 3. Patient is currently disease free.

5/27/11 Patient returns for follow-up 1 year after diagnosis of pT4a pN1 cM0 stage IIIA gastric carcinoma. Patient continues to be disease and symptom free.

Case Scenario 1: Esophagus		
FIELD NAME	**CODE**	**RATIONALE/DOCUMENTATION**
Cancer Identification		
Primary Site		
Histology		
Behavior		
Grade		
Grade System Type		
Grade System Value		
Lymph-vascular Invasion		
Collaborative Staging		
CS Tumor Size		
CS Extension		
CS Tumor Size/Ext Eval		
CS Lymph Nodes		
CS Lymph Nodes Eval		
Reg LN Pos		
Reg LN Exam		
CS Mets at DX		
CS Mets Eval		
SSF1: Clinical Assessment of Reg LN		
SSF2: Location of Tumor		
SSF3: Number of Regional Lymph Nodes with Extracapsular tumor		
SSF4: Distance to proximal edge of tumor from incisors		
SSF5: Distance to distal edge of tumor from incisors		
Treatment		
Surgical Procedure of Primary Site		
Approach – Surgery of Primary Site at This Facility		
Scope of Regional Lymph Node Surgery		
Surgical Procedure/Other Site		
Regional Treatment Modality		
Boost Treatment Modality		
Chemotherapy		

Case Scenario 2: Stomach		
FIELD NAME	**CODE**	**RATIONALE/DOCUMENTATION**
Cancer Identification		
Primary Site		
Histology		
Behavior		
Grade		
Grade System Type		
Grade System Value		
Lymph-vascular Invasion		
Collaborative Staging		
CS Tumor Size		
CS Extension		
CS Lymph Nodes		
CS Lymph Nodes Eval		
Reg LN Pos		
Reg LN Exam		
CS Mets at DX		
CS Mets Eval		
SSF1: Clinical Assessment of Reg LN		
SSF2: Location of Tumor		
SSF13: CEA		
SSF14: CEA Lab Value		
SSF15: CA 19-9 Lab Value		
SSF25: Involvement of Cardia & Distance from EGJ		
Treatment		
Surgical Procedure of Primary Site		
Approach – Surgery of Primary Site at This Facility		
Scope of Regional Lymph Node Surgery		
Surgical Procedure/Other Site		
Regional Treatment Modality		
Boost Treatment Modality		
Chemotherapy		