Multiple recurrences of esophageal adenocarcinoma after esophagectomy

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We present a patient with an unusual course of late and multiple recurrences of esophageal adenocarcinoma (EAC) after esophagectomy. A 57-year-old man with longstanding gastroesophageal reflux disease (GERD) underwent screening upper endoscopy in September 2004 and was found to have a 6 cm mass in a 7 cm segment of Barrett's esophagus (BE). Endoscopic ultrasound (EUS) showed a T2N0 mass and positron emission tomography (PET) scan revealed no distant metastases. Biopsies showed a poorly differentiated EAC of the distal esophagus. He underwent total esophagectomy (post-operatively restaged T3N1M0) followed by adjuvant chemoradiation therapy completed in February 2005. Over the next 5 years, he had regular surveillance endoscopies done every 3 to 6 months which were unremarkable. In July 2010, he started having progressive dysphagia to solids. Upper endoscopy revealed abnormal rugal fold just below esophago-gastric anastomosis with biopsies showing poorly differentiated EAC, signet ring cell type. EUS staging was T3N0 adenocarcinoma. Weekly chemotherapy with concurrent salvage radiation therapy was initiated and completed in October 2010. Post radiation, he was found to have a sub-centimeter nodule just below the esophago-gastric anastomosis (Figure 1A). Biopsies revealed

inflamed gastric mucosa without any malignant cells.

Multiple surveillance endoscopies and EUS examinations done at every 3 to 6 months interval for the next 3 years were unremarkable with resolution of the nodule (*Figure 1B*). In December 2013, patient presented with worsening cough, dyspnea and rapid weight loss. Upper endoscopy revealed friable mucosa at esophago-gastric anastomosis with biopsies showing poorly differentiated EAC (*Figure 1C*). He had a rapidly downhill course with development of malignant right pleural effusion and pericardial effusion with fatal cardiac tamponade.

The recurrence rates of EAC are high with over 40% to 50% reported after esophagectomy (1,2). Recurrences may be local, regional or distant. Over 75% of all recurrences occur within the first 2 years after surgery (1). Thereafter, the recurrence rate declines with less than 2% recurrences presenting after 6 years (1). Surveillance includes upper endoscopy, imaging or tumor markers with hope of earlier detection. However, there is no evidence that regular follow-up after initial therapy influences the outcome. Among the patients who developed recurrence, 50% present with symptoms, 45% are diagnosed by surveillance CT scan and 1% are detected by surveillance upper endoscopy (1). This

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Figure 1 Endoscopic view of anastomosis. (A) A sub-centimeter nodule just below the esophago-gastric anastomosis; (B) unremarkable surveillance endoscopy showing resolution of nodule at esophago-gastric anastomosis; (C) friable mucosa at esophago-gastric anastomosis where biopsies showed poorly differentiated esophageal adenocarcinoma.

case illustrates two points: (I) regular endoscopic surveillance has limited utility in earlier detection of cancer recurrence; (II) late recurrences can happen which raise a question of tumor dormancy (3).

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Footnote

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