Invasive Adenocarcinoma of the Proximal Third of the Esophagus Originating From Heterotopic Gastric Mucosa

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CASE REPORT

Inlet patches are islands of heterotopic gastric mucosa commonly found in the esophagus. The prevalence varies from 0.1% to 12%, and neoplastic progression has been reported in less than 60 cases. We present a 39-year-old man with a 1-year history of heartburn, improving with food intake and omeprazole with no additional risk factors. He denied pain or dysphagia and had lost 4 kg in 2 months. Physical examination only with a left, 0.5-cm supraclavicular lymph node. Upper endoscopy showed a patch of ectopic gastric mucosa below the cricopharyngeus, with a 4-cm luminal growth (Figure 1). The pathology report revealed a moderately differentiated invasive Grade II adenocarcinoma with a tubular pattern containing remnants of heterotopic gastric mucosa with moderate activity and regenerative atypia. HER2/Neu markers were negative (Figure 2).

Figure 1. Endoscopic image of the patch of ectopic gastric mucosa below the cricopharyngeus showing the tumor-like lesion.

Figure 2. Microscope image of the moderately differentiated invasive Grade II adenocarcinoma, magnification of the tubular pattern, with cytologic atypia and solid and glandular growth (hematoxylin and eosin stain, 100× magnification).
A neck magnetic resonance imaging and positron emission tomography/computed tomography showed the 46 × 15 × 22-mm intramural lesion subtotally obliterating the lumen, spanning from C7 to T3 into the adventitia, and a 31 × 20 × 18-mm right paratracheal node. Endoscopic ultrasonography showed invasion into the mucosa and submucosa, with a small 10-mm area extending into the muscularis propria; at 20 cm from the superior dental arch, on the right posterior wall, a 10–12 mm lymph node was confirmed (Figure 3). Fine needle aspiration biopsy of the adenopathy was positive for adenocarcinoma with final tumor staging as T2N1M0. Perioperative chemotherapy with a 5-fluorouracil, folinic acid, oxaliplatin, and docetaxel scheme was administered, and a partial esophagectomy with radical neck dissection was performed. The molecular analysis in the resection specimen showed MS stability and 6 tumor mutations: AKT2, TP53, ERBB4, SF3B1, KMT2A, and NF2. The patient has had no pain or dysphagia and has been under surveillance for 6 months.

Inlet patches in the proximal esophagus are generally asymptomatic.1 They have been described as congenital abnormalities because of an incomplete epithelialization of the esophagus developing columnar mucosa.2 Current statements from the European society for endoscopy do not support routine biopsies or surveillance of inlet patches. Other cohort studies have confirmed that malignancy is exceptional with a 0%–1.6% risk of dysplasia.3 International guidelines recommend a biopsy when mucosal irregularities are seen. Although our patient was young and asymptomatic, it is important to be aware of alarm symptoms and abnormalities seen on endoscopy. Neoplastic transformation is rare, and mutational burden in solid tumors is associated with sensitivity to some immunotherapeutic agents. Treatment strategies depend on tumor stage. Endoscopic mucosal resection and endoscopic submucosal dissection have been used in the early stages of cancer and have been reported in less than 10 cases.3,5 Esophagectomy with or without (chemo) radiotherapy achieves adequate control of advanced lesions.4,5

DISCLOSURES

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