Synchronous Granular Cell Tumors in the Esophagus and the Colon Treated by Endoscopic Resection

Min Kyu Park, Hyun Soo Kim, Chang Keun Park, Jae Kwon Jung, Dae Jin Kim, Hyang Eun Seo, Youn Jin Jung
Department of Gastroenterology, Daegu Fatima Hospital, Daegu, Korea

Granular cell tumor (GCT) was first described by Abrikosoff in 1926. Since then, lesions were found in many other locations, including the skin, breast, respiratory tract, and biliary system. Several large reviews showed that approximately 1% to 8% of all GCTs occur in the gastrointestinal tract, and approximately one third of these occur in the esophagus. Esophageal and colonic GCTs are usually asymptomatic, small (less than 2 cm), and found incidentally on endoscopy. Although GCTs are usually benign, some malignant GCT cases have been reported. Malignancy has been found to correlate with tumor size. Here we report a case of synchronous esophageal and colonic GCTs which is very rare. A 40-year-old woman showed a subepithelial tumor (15 mm) at the middle of esophagus and two ones at cecum (15 mm) and at transverse colon (10 mm), diagnosed with granular cell tumors on forcep biopsy. The tumors showed white to yellow mass with normal covering mucosa with hardness. The EUS showed a homogenous hyperechoic mass within 3rd submucosal layer. So we decided to remove them because of their malignant potential. At first, we resected the one at esophagus on the method of endoscopic submucosal dissection (flex knife) and two ones at colon on the method of endoscopic mucosal resection (flex knife and snare). Histological examination revealed the tumor consisted of plump neoplastic cells with abundant granular eosinophilic cytoplasm containing acidophilic periodic acid Schiff-positive, diastase-resistant granules. Immunohistochemical analysis showed the tumor cells expressed S-100 protein and neuron-specific enolase. And they were confirmed to benign. After procedure, she didn’t have any complication like pain or bleeding. Because the GCTs less than 2 cm are usually benign, the endoscopic resection is easy and safe, and recommended more.