PS 1045  Gastroenterology (Gastrointestinal Tract)

Esophageal Cancer Initially Presenting as Severe Paraneoplastic Hypercalcemia

Hye Shin Ahn¹, Jong Min YUN¹, Yeong Bok Lee¹, Hye Sung Won¹, Sung Soo Kim¹, Young Ok Kim¹
Department of Internal Medicine, Catholic University of Korea, Korea

Paraneoplastic hypercalcemia without bone metastasis occurs rarely in esophageal cancer. A 75-year-old man was admitted for general weakness and lethargy. Laboratory data showed high serum calcium level (corrected calcium 14.6 mg/dL), low parathyroid hormone level (3.3 pg/mL) and high parathyroid hormone-related peptide level (3.5 pmol/L). Esophagogastroduodenoscopy showed a malignant tumor in the esophagus. Histology showed moderately differentiated adenocarcinoma. Bone scan showed no evidence of bone metastasis. Despite intravenous fluid therapy, diuretics and intravenous bisphosphonate, the patient's calcium levels remained high and mental state did not show improvement, therefore hemodialysis was started. After hemodialysis treatment, the serum calcium level was subsequently normalized and his mental status was improved.

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Nighttime Distal Impedance Levels in Patients with Gerd

Ban Seok Kim¹, Seon-young Park¹
Chonnam National University Hospital, Korea

Background: Esophageal intraluminal baseline impedance may be used to evaluate status of mucosa integrity. However, baseline impedance easily may be affected by feeding, nature of refluxates and esophageal clearance and show the wide range of level. However, nighttime impedance levels show more stable than daytime. We aimed to compare baseline impedance levels in patients with GERD according to the reflux characteristics.

Methods: One-hundred patients (male 45, mean age 54.6±14.0 years) with GERD symptoms underwent 24 hour pH/impedance monitoring. We analyzed baseline impedance values (BIL from z6, z5, and z2) form 3 sites (3, 5 and 15 cm above the LES). BIL between 00:00 am to 6:00 am in each individual were selected to avoid the effects associated with feeding or swallowing.

Results: There were 28 patients with the acid reflux group, and 53 patients in the nonacid reflux group. Mean BIL at z6 was significantly higher in ‘no reflux’ group and ‘nonacid reflux’ group than in ‘acid reflux’ group [3000 (2325–3500) Ω vs. 1350 (200–2487) Ω, p<0.001; 2500 (1825–3000) Ω vs. 1350 (200–2487) Ω, p=0.001]. Mean BIL at z5 was significantly higher in ‘no reflux’ group and ‘nonacid reflux’ group than in ‘acid reflux’ group [2900 (2125–3520) Ω vs. 1900 (1287–2687) Ω, p<0.001; 2600 (2000–3475) Ω vs. 1900 (1287–2687), p=0.003]. However, there was no significant difference between ‘acid reflux’, ‘nonacid reflux’ and ‘no reflux’ group in the mean BIL at z2 (proximal esophagus). There was a significant negative correlation between BIL (z6 and z5) and acid exposure percent time (r=-0.319, p<0.001 and r=-0.297, p<0.001). There was a negative correlation between BIL (z6 and z5) and bolus exposure percent time (r=-0.385, p<0.001 and r=-0.351, p<0.001).

Conclusions: Patients with acid reflux events have low nighttime baseline impedance. Nighttime baseline impedance could suggest the diagnostic value for GERD.

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Hematoma in Esophageal Duplication Cyst Masquerading Submucosal Tumor

Won Il Park¹, Dae Hyeon Cho¹, Ji Eun Oh¹, Hyun Chin Cho¹, Kwang Min Kim¹, Kil Jong Yu¹, Hyoun Soo Lee¹, Man Je Park¹, Sang goon Shim¹, Chang Uk Jeong¹
Samsung Changwon Hospital, Korea

Esophageal duplication cysts account for a very small percentage of benign esophageal tumor that is usually diagnosed in childhood, but very rare cases remain asymptomatic until adolescence. They may be asymptomatic or present with complications like infection, bleeding, or mass effect. A 19-years-women visited our hospital presenting chest pain and dysphagia. Contrast enhanced computed tomography of the chest showed a heterogeneous density of mass in left lateral wall of distal thoracic esophagus. On endoscopic ultrasonography, a heterogeneously echotextured lesion with anechoic components present and no vascular component in Doppler sonogram at intramural location in the lower esophagus was noted. In view of symptoms of dysphagia and possibility of esophageal submucosal tumor, surgical excision through posterolateral thoracotomy was performed. In gross finding, a mass measured 4.0 x 4.0 x 2.0 cm and formed cyst with hemotoma formation in it. Histopathologically the cyst was lined by pseudostratified ciliated columnar epithelium surrounded by inner circular and outer longitudinal smooth muscle layers without cartilage. So it was diagnosed as a complicated esophageal duplication cyst with hemotoma formation. Esophageal duplication cyst represent rare benign tumor of congenital foregut anomalies. Up to 80% of these cysts are diagnosed in childhood, less than 7% remain asymptomatic until adolescence. Pain and dysphagia are the most common symptoms in adults. Complications may be infections, rupture or bleeding. Diagnosis is usually made by computed tomography and endoscopic ultrasound. The only definite treatment is surgical excision. Pathologically, the cyst is covered with nonkeratinizing squamous or ciliated columnar epithelium, and the cyst wall contains two layers of smooth muscle. These findings, accompanied by a lack of cartilage in the cyst wall, can differentiate an esophageal duplication cyst from a bronchogenic cyst.