LETTERS TO THE EDITOR EDİTÖRE MEKTUPLAR **Incomplete esophageal duplication presenting with reflux symptoms in an adult**

Erişkin dönemde reflü semptomları ile başvuran özofagus duplikasyonu

To the Editor,

Duplication of the esophagus is the second most common duplication of the alimentary tract, accounting for 10-20% of all gastrointestinal (GI) tract duplications. Most of them are cystic; the tubular type is exceedingly rare. Most esophageal duplications are located in the lower third of the esophagus (1).

Cystic or tubular esophageal duplications may present with various symptoms, such as recurrent dysphagia, vomiting, respiratory distress, and hematemesis. Most patients develop symptoms during childhood, but they may occasionally remain asymptomatic into adult life (2). We present a case admitted with laryngopharyngeal reflux symptoms who was diagnosed with incomplete tubular



Figure 1. Endoscopic view of the esophageal duplication showing two lumina.

Address for correspondence: Nevin ORUÇ Ege Üniversitesi Tıp Fakültesi Gastroenteroloji Bilim Dalı Bornova 35100 İzmir, Turkey Phone: + 90 232 388 19 69 E-mail: nevintr@yahoo.com esophageal duplication during adulthood.

A 23-year-old male was referred to our outpatient clinic with dysphagia and heartburn. He had a history of hoarseness and retrosternal pain for three years, suggesting laryngopharyngeal reflux disease. Initial 24-hr pH monitoring conducted at a different medical center was normal. He had been placed on on-demand proton pump inhibitor (PPI) treatment for reflux in the previous year. He began to experience mild dysphagia to solids in the previous month and was referred to our clinic. His medical history was otherwise noncontributory. There was no history of cough during swallowing. Physical examination and routine blood tests were unremarkable.



Figure 2. Lumina conjoined at 30 cm of esophagus.

Manuscript received: 03.11.2008 Accepted: 03.08.2009

doi: 10.4318/tjg.2010.0082



Figure 3. Barium esophagogram showing barrel-shaped esophageal duplication.

Upper GI endoscopy showed two esophageal lumina located 25 cm from the incisors (Figure 1). The endoscope could be passed through both lumina; small ulcerations and edematous mucosa were noted in one of the duplicated segments. We demonstrated that one of the lumina conjoined to another at 30 cm from the incisors (Figure 2). He also had mild antral gastritis, but rapid urease test for *Helicobacter pylori* was negative. Barium esophagogram confirmed two esophageal lumina in the up-

REFERENCES

- Mourra N, Lewin M, Parc Y. Clinical challenges and images in GI. Esophageal tubular duplication. Gastroenterology 2008; 134: 669, 899.
- Lenz P, Wessling J, Foell D, et al. Incomplete tubular duplication of the esophagus becoming symptomatic in adulthood. Endoscopy 2009; 41: E114–5.
- 3. Estefan Ventura D, Reibscheid S, Colleoni R, Tomaz Schettini S. Surgical images: soft tissue. Tubular duplication of the esophagus. Can J Surg 2008; 51: 205-6.

per esophagus (Figure 3), but no esophageal reflux findings. No other congenital anomaly was identified. It was decided to provide conservative management with PPI and sucralfate treatment. At the two-month follow-up visit, the patient's symptoms had improved and endoscopic evaluation demonstrated the healed ulcerations in the esophageal duplicated segment.

Most patients with esophageal duplication are recognized in childhood, with 70-90% diagnosed before the age of two; however, it may be discovered incidentally in adulthood (3), as in our patient. It is reasonable to assume that our patient's symptoms, including long-standing hoarseness and retrosternal pain suggesting laryngopharyngeal reflux, were not due to the real reflux disease but probably diminished motility and clearance of foods in the upper esophagus due to duplication. Tubular esophageal duplication may present with gastroesophageal reflux symptoms (4). To the best of our knowledge, no previous reports have described an association between tubular esophageal duplication and laryngopharyngeal reflux symptoms, such as hoarseness.

Malignancies involving cystic duplication (5) and intestinal metaplasia in partial duplication of the esophagus (6) were reported earlier. However, in our patient, there was no evidence of esophageal malignancy or intestinal metaplasia. Esophageal duplications associated with complications and diagnosed during infancy should be treated surgically. However, incomplete duplications without any complications might be treated conservatively with strict follow-up.

In addition to drawing attention to this rare entity, we underscore that the symptoms suggesting laryngopharyngeal reflux may be the first sign of tubular duplication of the esophagus. Patients with ongoing reflux-like symptoms should be evaluated by upper GI endoscopy before starting ondemand reflux treatment.

- 4. Devi SR, Ashraf SA, Kolassery S, et al. Congenital esophageal duplication. Gastrointest Endosc 2004; 59: 541.
- 5. Singh S, Pal P, Sikora S, et al. Squamous cell carcinoma arising from a congenital duplication cyst of the esophagus in a young adult. Dis Esophagus 2001; 14: 258.
- Phadke AY, Shah SK, Rajput S, et al. Incomplete tubular duplication of the esophagus lined by heterotopic gastric epithelium, presenting in adulthood. Endoscopy 2000; 23: 35-6.

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