At the end of 48 hours, the results were obtained and evaluated, and DeMeester scores and symptom correlation for each patient were defined successfully.

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Intragastric band erosion due to band slippage after laparoscopic adjustable gastric banding: the Gastroenterologist aspect

Laparoskopik ayarlanabilir gastrik band uygulaması sonrası bandın kayması nedeniyle gelişen intragastrik band erozyonu: Gastroenterolog bakışı

To the Editor,

Bariatric surgery is a currently proven, effective treatment for morbid obesity, and laparoscopic adjustable gastric banding (LAGB) is one of the most popular minimally invasive restrictive procedures (1-3). With this method, a band can be placed laparoscopically around the proximal side of the stomach about 2 centimeters distal to the gastroesophageal junction. This leads to creation of a pouch that contains a volume of about 15 milliliters so that digestive volume can be restricted to this amount (1). The complications reported for LAGB range from trivial infections at the port site to life-threatening hemorrhage. The major complications due to the procedure include band slippage, pouch dilation and intragastric band migration or band erosion (1-3). Herein, we present the gastroscopic findings of a patient with intragastric band erosion due to band slippage.

A 34-year-old female admitted to our clinic with the complaints of abdominal discomfort, nausea,

Address for correspondence: Erkin ÖZTAŞ Ankara Yuksek İhtisas Eğitim ve Araştırma Hastanesi Gastroenteroloji Servisi Kızılay Sk. No: 4 Sıhhiye Altındağ, 06100 Ankara Turkey Phone: + 90 312 306 13 34 E-mail: erkinous@yahoo.com vomiting, and stabbing pain with eating for 15 days. The patient's history was notable only for morbid obesity treated with LABG (A.M.I. Soft Gastric Band Premium Long Adjustable Gastric Banding Implant, AGB 376) two years prior to admission. The patient also reported that she had regained weight in the last few months. On physical examination, her vital signs were within normal limits, the epigastrium was slightly painful at palpation and bowel sounds were normoactive. The laboratory tests demonstrated a slightly low hemoglobin level of 11.7 g/dl (normal range: 12-14.5 g/dl) and high white blood cell count, at 13,400/uL (normal range: 4,000-10,000/uL). Upper gastrointestinal endoscopy was performed, and surprisingly, a part of the band was seen to be localized at the incisura angularis of the stomach (Figure 1). The distal part of the stomach (at the level of the incisura angularis) was wrapped tightly around the band, like a ring encircling a finger, pro-

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Figure 1. Image during endoscopic maneuver of intragastric band erosion on the incisura angularis (large arrow) and fundal and prepyloric antrum part of the stomach (small arrows).



Figure 2. Illustration of gastric band slippage in our patient.

bably due to the downward slippage of the band (Figure 2). Furthermore, two gastric ulcers located at the posterior wall of the great curvature were determined during endoscopy. The patient was then successfully managed by revision bariatric surgery through laparotomy (removal of the band and Roux-en-Y gastric bypass).

Band slippage is characterized by the dilatation of the upper gastric pouch due to the herniation of the stomach through the band. The factors involved in the development of this complication are numerous, but the most important and consistent mechanism is related to the surgical technique. Patient noncompliance with diet restrictions and recurrent vomiting can lead to band slippage, as can athletic activity and heavy lifting (1-7). On the other hand, the decrease in the visceral fat due to weight loss can lead to a decline in the supportive tissue surrounding the stomach and consequently can facilitate the band slippage. These complications can occur any time after band placement and must be considered in any patient who develops new-onset gastrointestinal reflux, upper abdominal pain, nausea, vomiting, loss of band restriction, and weight gain (2). Similar symptoms were present in our case, but gastroscopy revealed intragastric band erosion rather than a pure obstruction. Fortunately, no major vascular injury or fatal hemorrhage occurred due to the intragastric band erosion. Several studies and case reports have been reported from Turkey about AGB complications (8-11). Coskun et al. (8) performed LAGB in 35 patients. Band migration in two patients and pouch dilatation in four patients were observed as a long-term complication. In another study, Taşkin et al. (9) reported that after stoma AGB in 24 patients, gastric wall erosion occurred in two patients and the bands had to be removed. In that study, the other complications encountered included incisional hernia (1 patient), outlet stenosis and reflux esophagitis (1 patient), reservoir leakage (1 patient), and gastrointestinal bleeding (1 patient). Two patients died of pulmonary embolism and acute gastrointestinal bleeding.

As LAGB is one of the most commonly performed bariatric surgeries worldwide and in our country, gastroenterologists must be aware of the complications that can occur due to this procedure. In addition, gastroenterologists must learn the serious complications of LABG and must consider the fact that a surgical approach is often necessary.

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Duodenojejunal invagination caused by small bowel metastasis of renal cell carcinoma

Renal hücreli karsinomun ince barsak metastazının neden olduğu duodeno-jejunal invajinasyon

To the Editor,

A 69-year-old male patient was admitted to the hospital complaining of bloody vomiting. He had been using Coumadin[™] for 16 years because of mitral valve replacement. He had a history of renal cell carcinoma (RCC) in the right kidney and had undergone a right nephrectomy six years previously. The tumor was clear cell type and had invaded the renal fascia. Abdominal and thoracic computed tomography (CT) scan revealed gastric dilatation, duodenojejunal invagination (Figure 1A) and two nodules in the right lung. Endoscopic examination revealed a firm mass located at the duodenojejunal junction, which was partially obstructing the intestinal lumen. Multiple biopsies were taken from the mass, and the case was diagnosed as malignant tumor infiltration.

Address for correspondence: Kemal Kürşat BOZKURT Süleyman Demirel University, School of Medicine, Department of Pathology, Isparta, Turkey Phone: + 90 246 211 29 34 E-mail: kemalkbozkurt@hotmail.com In exploratory laparotomy, the tumor was detected 20 cm distal of the Treitz ligament in the duodenojejunal junction. The lumen was partially obstructed by the mass and the following 30-cm intestinal segment was invaginated. The tumor was resected as segmental small bowel resection. On macroscopic examination, a single polypoid nodule protruding into the lumen was found in the wall of the small bowel (Figure 1B). Histopathologic examination revealed neoplastic cells with fine cytoplasmic membrane, clear cytoplasm and centrally localized nuclei in a nodular growth pattern (Figure 1C), showing immunohistochemical positivity for pancytokeratin, CD10 (Figure 1D) and vimentin. The case was diagnosed as "small bowel metastasis of RCC" with these findings.

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