

Gastric heterotopia in the gallbladder: A case report

Safra kesesinde gastrik heterotopi: Olgu sunumu

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3 yıldır tekrarlayan karın ağrısı yakınması olan 26 yaşındaki erkek hastanın kolesistektomi materyalinde rastlantısal olarak bulunan ektopik gastrik mukoza olgusu sunulmaktadır. Aberran gastrik doku, midenin pilor ve fundus bezlerinden oluşmaktaydı. Lezyonu çevreleyen safra kesesi mukozasında sialomusin içeren goblet hücreleri ile karakterli fokal intestinal metaplazi odakları görüldü. Heterotopik dokuda herhangi bir metaplazik değişiklik saptanmadı.

Key words: Safra kesesi, mide mukozası, heterotopi.

A case of incidentally identified ectopic gastric mucosa in the gallbladder of a 26-year-old man with a three year history of recurrent abdominal pain is presented. The aberrant gastric tissue consisted of gastric pyloric glands and fundic glands. Focal intestinal metaplasia characterized by goblet cells containing sialomucin was seen in the surrounding gallbladder mucosa but no metaplastic change was seen in the heterotopic tissue.

Anahtar kelimeler: Gallbladder, gastric mucosa, heterotopia

INTRODUCTION

Ectopic gastric mucosa is a common finding throughout the gastrointestinal tract from tongue to rectum (1,2). However, the presence of ectopic gastric mucosa within the biliary system is extremely rare (1). Patients are usually under age of 30 and there is no sex predilection (1). The most frequent complaint is a colicky pain in the epigastrium or right upper quadrant, which many be accompanied by nausea and vomiting. Usually, the lesion is incidentally found in cholecystectomy specimens (3).

CASE REPORT

A 26 year-old man presented with a three year history of recurrent colicky pain. On admission, the results of physical examination and laboratory tests, including peripheral blood count, serum protein and liver function tests were normal. Abdominal ultrasonography revealed multiple gallstones and cholecystectomy was performed.

Pathological findings

Macroscopically, the gallbladder was 9x4x2.5 cm in diameter and dilated in appearance. On opening, it was completely filled with mucoid material and its wall was thickened with a 2cm polypoid lesion located at the neck region. The surrounding mucosa was flat reticulated and contained pale amber bile. No stone was seen.

Histological examination showed that the surface of the polypoid lesion was lined by foveolar epithelium beneath which there were many pyloric mucous glands. In addition, fundic glands characterized by parietal and chief cells were present (Figure 1). Focally, the gallbladder wall was found to be thickened as a result of intramural development of the glandular structures. No Paneth or goblet cells were observed in gastric mucosa. Histochemically, Alcian blue/periodic acid Schiff pH 2.5 stain showed that foveolar cells in the gastric epithelium contained PAS (+) neutral mucin (Figure 2). High iron diamine/alcian blue pH 2.5 stain showed that surrounding mucosa of ordinary

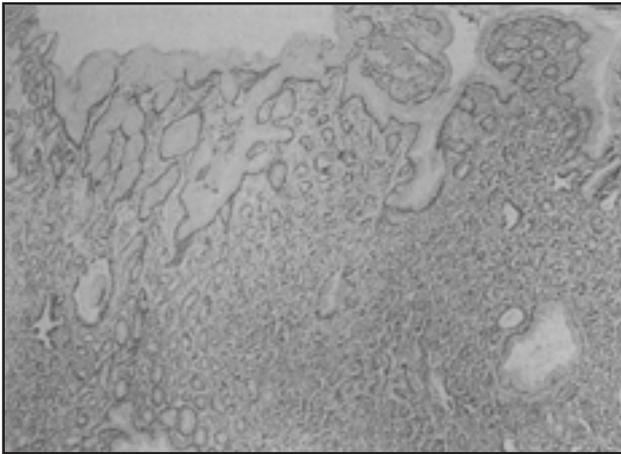


Figure 1. Fundic glands characterized by parietal and chief cells (H&E X 200)

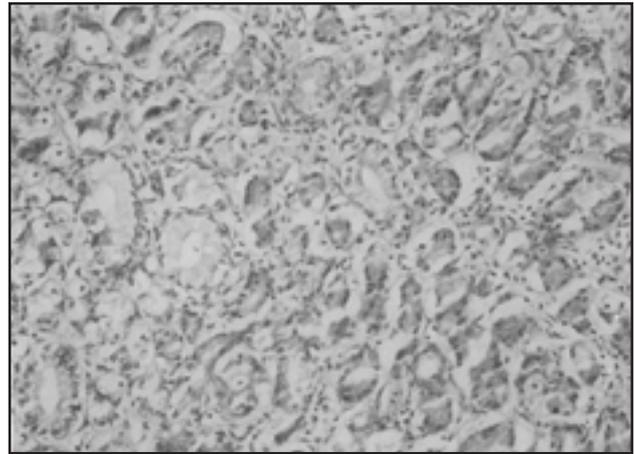


Figure 2. Gastric foveolar epithelial cells containing PAS (+) neutral mucin (PAS/AB-pH2.5X 200)

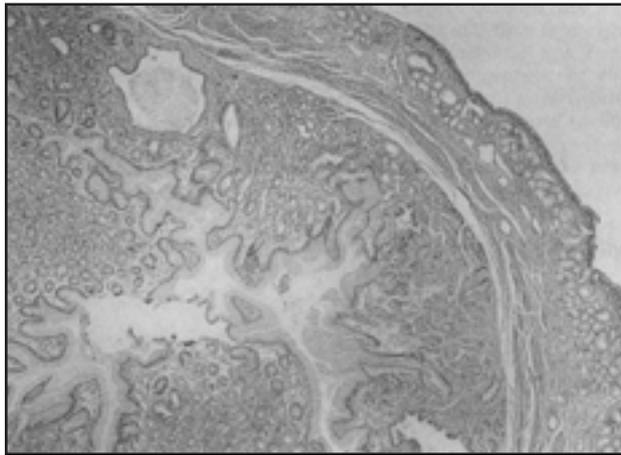


Figure 3. Surface cells containing sulfomucin (black in color) and intestinal metaplasia characterized by goblet cells containing sialomucin (blue in color) were seen in the surrounding mucosa of the gastric heterotopia (HID/AB-pH 2.5X100)

gallbladder epithelium contained sulfomucin and that there were intestinal metaplasia foci characterized by sialomucin containing goblet cells (Figure 3).

DISCUSSION

Heterotopic gastric mucosa was first described by Egyedi in 1934 (4). It is clear that unlike gastric metaplasias, a frequent finding in cholecystitis,

gastric heterotopia is a rare finding. The most frequent location is the ductus cysticus and neck region, as in our case (5). There is no sex predilection and it usually occurs in young patients under 30 years of age. The clinical history usually reveals a colicky pain localized in the right upper abdominal quadrant occurring after meals and associated with nausea and vomiting which suggest cholecystitis, especially if stones accompany it.

Heterotopic gastric mucosa is either incidentally found in the gallbladders of patients who have undergone cholecystectomy due to cholelithiasis / cholecystitis or recognized as a polypoid lesion at abdominal ultrasound, when malignancy may be suspected.

Macroscopically, the lesions are polypoid, intramural masses or just appear as a focally thickened gallbladder wall (2,3,6). The most characteristic feature of this lesion is the presence of fundic glands with parietal and chief cells and pyloric type mucous glands on light microscopic examination (1). This finding helps the differentiation of gastric heterotopia from metaplasia, a common finding in chronic cholecystitis, which is composed of only pyloric glands. In addition, as observed in our case, while the surrounding mucosa of gastric heterotopia usually shows intestinal metaplasia, no pyloric metaplasia is seen.

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