## Case Report



# Unusual Cause of Submucosal Mass in the Duodenal Bulb: Ectopic Pancreas

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#### ABSTRACT

Ectopic pancreas (EP) is the presence of an abnormally located focus of normally developed pancreatic tissue outside the boundaries of the orthotopic pancreas. Although EP is usually found in the upper gastrointestinal tract they also could be found anywhere in the gastrointestinal tract, pelvis and in the thorax. Here, we report an uncommon case of EP in the duodenal bulb.

Key words: Duodenal bulb, Submucosal mass, Ectopic pancreas

#### ÖZET

#### Bulbusda Submukozal Lezyonun Nadir Nedeni: Ektopik Pankreas

Ektopik pankreas, pankreasın normal lokalizasyonu dışında saptanan pankreas dokusudur. Ektopik pankreas genellikle üst gastrointestinal sistemde saptanırken, tüm gastrointestinal sistemde, pelvis ve toraksta bulunabilir. Burada bulbusta lokalize ektopik pankreası takdim ettik.

Anahtar Sözcükler: Bulbus, Submukozal lezyon, Ektopik pankreas

Ectopic pancreas (EP) is the presence of an abnormally located focus of normally developed pancreatic tissue outside the boundaries of the orthotopic pancreas. Although EP is usually found in the upper gastrointestinal tract they also could be found anywhere in the gastrointestinal tract, pelvis and in the thorax (1). Here, we report an uncommon case of EP in the duodenal bulb.

#### CASE REPORT

A 30-year-old woman presented to our hospital with epigastric pain. Physical examination was normal except the distention on the epigastric area. Complete blood count and biochemical parameters were in normal ranges. Upper gastrointestinal endoscopy demonstrated gastritis and a submucosal mass in the duodenal bulb (Figure1). Multiple deep endoscopic biopsies were taken with jumbo biopsy forceps. Histopathological findings demonstrated a lesion between the proper muscular layer and the serosa of the duodenal, while it was constituted by pancreatic tissue with acinar cells, duct cells, and islets of Langerhans were observed (Figure 2).

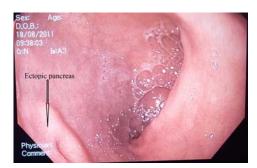


Figure 1. Endoscopic image showing submucosal lesion in the duodenal bulb

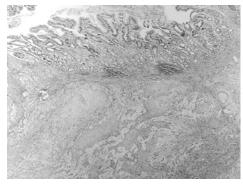


Figure 2. Photomicrograph of the resection specimen showing pancreatic tissue within the duodenal bulb submucosa (HE, >100)

### **DISCUSSION**

The reported incidence of EP in the gastrointestinal tract ranged from 0.55% to 13.7% in autoptic series, and 0.2% in laparotomy (2). EP can affect all ages, and men are usually affected three times more than women. In our case, the patient was a female. EP is usually asymptomatic as in our patient. Symptoms due to mechanical obstruction are rarely observed (3). This disorder is difficult to diagnose preoperatively. Ultrasonography of the abdomen or computed tomography findings are usually non specific except in the presence of thickened gastric wall. Endoscopic ultrasonography has proven to be a useful adjunct in identification of pancreatic rests, localizing in the submucosa. The combination of endoscopic ultrasonography with fine-needle aspiration allows cytologic evaluation of submucosal gastrointestinal lesions, having a sensitivity ranging 80%-100%. However, there is a few data regarding the accuracy of cytological evaluation with combination of

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endoscopic ultrasonography and fine-needle aspiration for EP (4). On the other hand a diagnosis can occasionally be made on the basis of endoscopic biopsies as in our patient. Histopathological examination is inconclusive in some cases because normal gastric mucosa covers the lesions (5). In most of the cases, however, the diagnosis is confirmed only after surgical resection with pathologic examination of the surgical specimens.

EP generally comes from childhood, it rarely causes symptoms. If EP is discovered as an incidental finding, local excision is recommended especially when the EP associated symptoms are observed. The prognosis is good after complete resection of the mass.

In conclusion EP is very uncommon and almost all were reported in the children. EP should be considered in the differential diagnosis of a potentially submucosal tumor in the duodenal bulb.

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