

## Duodenal Lipomatosis: A Case with Postprandial Dyspepsia

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### Abstract

Lipomas are benign mesenchymal tumors and constitute 5-6% of gastrointestinal tumors. They are generally asymptomatic and the occurrence of symptoms is related to the location and size of tumor. We present a 28 year old man with refractory dyspepsia for 18 months. In upper GI endoscopy multiple smooth submucosal masses with positive pillow sign were detected in second part of duodenum. Diagnosis was confirmed with CT-Scan.

### Introduction

Lipomas could be detected as benign mesenchymal tumors in all organs while they are rare in gastrointestinal tract (1). They constitute 5-6% of gastrointestinal (GI) tumors (1).

### Case presentation:

Our patient was a 28 year old man that presented with dyspeptic symptoms such as early satiety, postprandial epigastric discomfort, nausea and occasional vomiting. He had no family history of GI Cancers. He had received multiple therapeutic regimens, but had no improvement in his symptoms. An upper GI endoscopy was performed revealing

multiple smooth, yellow shadowed submucosal masses at different sizes, with positive pillow sign (in forceps examination) in second part of duodenum. Endoscope passed with difficulty from D1 to D2. Biopsies were obtained. With probable diagnosis of duodenal lipomatosis, an abdominal spiral CT- Scan was performed that showed multiple lipoma of duodenum (figure 1).

Due to refractory symptoms, surgical treatment was planned and longitudinal duodenotomy, gastro-jejunostomy and biopsy sampling were performed. In laparatomic exploration, lipomas were limited to second

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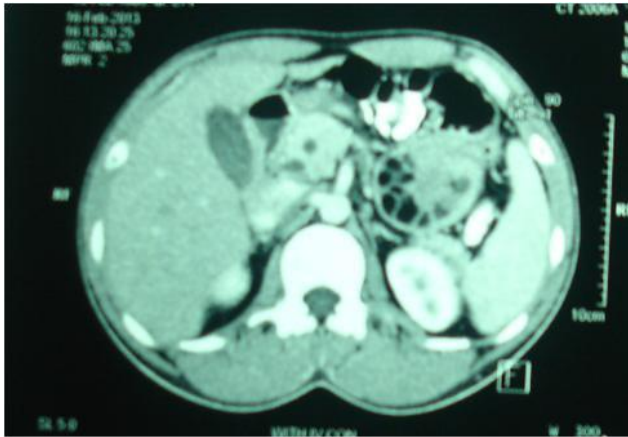
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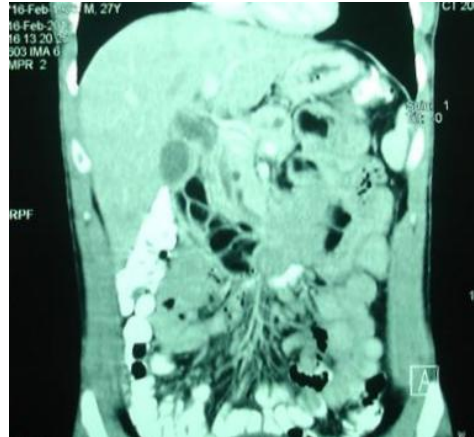
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and third parts of duodenum. Lipoma diagnosis was confirmed histologically and the patient's symptoms fully relieved.



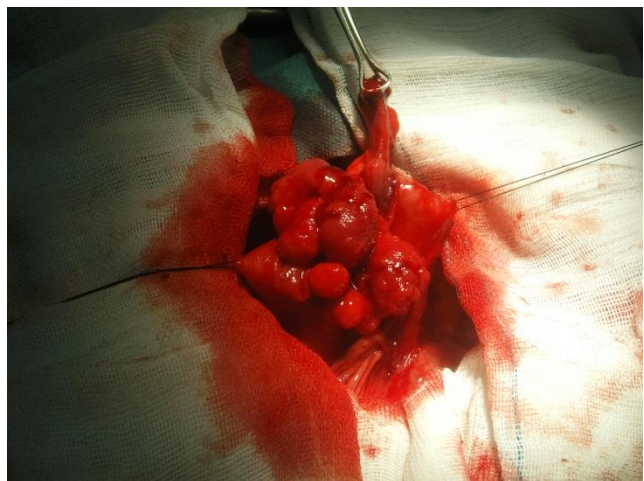
mass of fat density (-50 to -100 HFU) is seen (6). Also, upper GI endoscopy (EUS), as an effective and reliable diagnostic tool, can be used for diagnosis and treatment of solitary small



## Discussion

Lipomas are benign, slow growing, mesenchymal tumors (1, 2). They are uncommon in GI Tract, accounting for 5-6% of small intestinal benign tumors (1). Approximately, 20-25% of GI lipomas occur in the small bowel (3) which is the second most common site for GI lipoma (3). Only 4% of GI lipomas are seen in the duodenum (4). Lipomatosis affects both genders equally typically occurring after fourth decade of life (5). Duodenal lipomas are usually solitary and can occur anywhere in the duodenum; they are rarely multiple (3). Lipomas are generally asymptomatic and the occurrence of symptoms is related to the location and size of tumor (1). For differentiation of duodenal lipoma from GIST or liposarcoma, CT- Scan or MRI could be used (6). In CT scan, smooth well-circumscribed

duodenal protruding lesions (7). In EUS, a homogenous hyperechoic mass is detected within submucosal layer (8). Therapeutic interventions such as surgery or endoscopic resection (for pedunculated solitary lipoma) are performed when the patient is symptomatic (2). However, the final diagnosis must be approved through histological examinations (2).



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