CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

Medical Imaging Quiz – Case 62

A 64-year-old man performed an abdominal computed tomography (CT) due to persistent abdominal pain and constipation for 6 months. He mentioned nothing from his past medical history. Abdominal CT revealed a round shaped hypodense mass to the second part of duodenum (fig. 1). According to this imaging finding, surgical consultation stated that no surgery was needed at that time unless other symptoms occurred. This imaging finding is not considered responsible for patient's symptoms.

Comments

Gastrointestinal tract lipomas are uncommon benign tumours that can be found anywhere along the entire length of the gastrointestinal tract. The most common location for these lesions is the colon, usually at the right side of the colon, followed by the ileum and the jejunum. Stomach and esophagus lipomas are rare whereas duodenal lipomas are extremely rare with limited case reports present in literature. The peak of incidence seems to be around the fifth and seventh decade of life.

The majority of lipomas are asymptomatic and found incidentally. As they can be pedunculated they occasionally present as the leading point of an intussusception. When large they may develop mucosal ulceration and present with iron deficiency anemia or positive fecal occult blood testing. Acute heavy bleeding is uncommon. Duodenal lipomas may present as gastrointestinal bleeding, abdominal pain, obstruction or upper abdominal fullness.



Figure 1. Abdominal computed tomography (CT) revealing round shaped hypodense mass (-110 HU) to the second part of duodenum.

ARCHIVES OF HELLENIC MEDICINE 2020, 37(4):572–573 ΑΡΧΕΙΑ ΕΛΛΗΝΙΚΗΣ ΙΑΤΡΙΚΗΣ 2020, 37(4):572–573

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Gastrointestinal lipomas, like lipomas elsewhere, are composed of mature adipocytes with an enveloping fibrous capsule. The vast majority (90–95%) are submucosal, with only a small number subserosal, and can be sessile or pedunculated.

In barium studies lipomas are usually observed submucosal or occasionally pedunculated. They usually have a very smooth surface, unless mucosal ulceration is present.

On both computed tomography and magnetic resonance imaging lipomas are usually easy to diagnose on account of their density (-80 to -120 HU)/intensity following that of fat on all sequences. Lipomas are usually entirely of fat density without solid components. If a solid non-fat component is seen then the possibility of the mass representing a liposarcoma should be entertained, although these are exceedingly rare. Overlying ulceration may result in some non-fat density/intensity stranding near the mucosal surface. The successful diagnostic means are CT, magnetic resonance imaging (MRI), endoscopy and endoscopic ultrasound (EUS).

Gastrointestinal lipomas are benign slow-growing lesions, and usually little doubt exists as to the diagnosis so no treatment is required, unless they are symptomatic. Some of these lesions require surgical resection, endoscopic or laparoscopy excision whenever this is possible, as a result of their size and location.

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