Clinical History:

The 67-year-old female patient was referred to our institution for the evaluation of persistent right lumbar pain. An MDCT examination was performed and the results revealed an air–fluid level image between the duodenum and the pancreatic head.

Imaging Findings:

The patient was referred to our institution for the evaluation of persistent right lumbar pain. An abdominal-pelvic CT was performed using multidetector equipment. It demonstrated an air–fluid level image between the duodenum and the pancreatic head (Fig. 1). No pneumoperitoneum or ascites were observed. Continuity with the lumen of the second portion of the duodenum was well demonstrated by coronal 2D reconstruction (Fig. 2). We interpreted this “incidentaloma” as duodenal diverticula. An upper GI barium examination confirmed the presence of a duodenal diverticulum emerging from the second portion (Fig. 3).

Discussion:

Due to its high prevalence, duodenal diverticula are, at present, considered to constitute a normal anatomical variant. They usually arise from the second or third portions of the duodenum and lie between the duodenum and the pancreas. They are, in the majority of cases, of no clinical significance. Peri-ampullary diverticula may interfere with the drainage of the bile and predispose to a degree of biliary obstruction and the formation of bile duct stones. Although extremely rare, haemorrhage and duodenal diverticulitis are possible complications. The diagnosis of a duodenal diverticulum is frequently an incidental finding during upper GI barium examination for other related pathology. Using multidetector equipment, duodenal diverticula can be easily diagnosed by CT. In the axial plane, the CT appearance of a duodenal diverticulum includes a mass-like structure that is interposed between the duodenum and the pancreatic head containing air, an air/fluid level or contrast material. The continuity with the lumen of the duodenum is well demonstrated by coronal and sagittal images with MPR reconstruction.

Differential Diagnosis List: Duodenal diverticulum.

Final Diagnosis: Duodenal diverticulum.
References:


**Figure 1**

**Description:** The CT scan showing an air-fluid level image between the duodenum and the pancreatic head. **Origin:**
Description: The CT image showing the duodenal diverticulum filled with oral contrast, emerging from the second part of the duodenum. Origin:
Description: The CT image showing the duodenal diverticulum emerging from the second part of the duodenum. Origin:
Figure 3

Description: An image obtained with upper GI barium examination confirming the duodenal diverticulum. Origin: