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Case Report

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Misdiagnosis of Gastric Diverticulum as a Left Adrenal Lesion

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CASE REPORT

We describe a case where a follow-up CT scan revealed a stomach diverticulum that had been misidentified as a left adrenal lesion on both ultrasonography and CT imaging.

After experiencing left abdomen pain, a 56-year-old man with a history of gastroesophageal reflux illness was brought to our hospital. There was no history of fatigue, jaundice, hematemesis, vomiting, or melena. Upon clinical examination, no tumors were seen, and bowel sounds were normal. A hypoechoic 24 mm tumor was discovered in the left adrenal loggia during an ultrasonography abdomen examination. An adrenal adenoma was diagnosed based on a CT scan of the abdomen that revealed a spherical mass measuring 2.4 cm near the left adrenal gland with densitometric mean values of -7 HU (Figure 1). The patient received a full endocrinological evaluation in the days that followed, which revealed normal findings with normal adrenal function; the urinary catecholamines and ACTH level were both within normal limits. After that, the patient was sent home with a follow-up CT scan arranged.

The patient's second follow-up CT scan, performed six months later, revealed a small intralesional gas bubble (Figure 2). The CT scan was then repeated following oral administration of Gastrogen®, a contrast medium. The previously described lesion showed continuity with the gastric wall, and the lumen lesion's contrast medium staining with contextual air bubbles suggested the presence of a gastric diverticulum (Figures 3 and 4). Later, an esophagogas-troduodenoscopy confirmed the diagnosis.

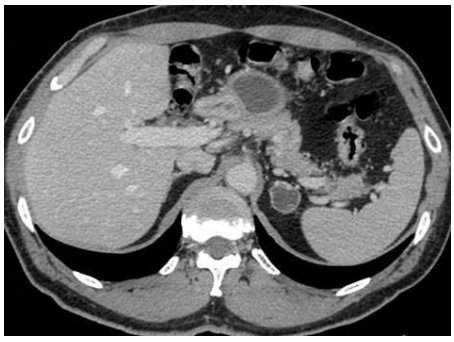

Figure 1: Axial contrast- enhanced CT image showing a rounded lesion interpreted as the upper portion of the left adrenal gland with sharp edges and weak parietal enhancement.

Figure 2: Axial contrast- enhanced CT image showing a gas bubble in the ventral aspect of the suprarenal lesion.

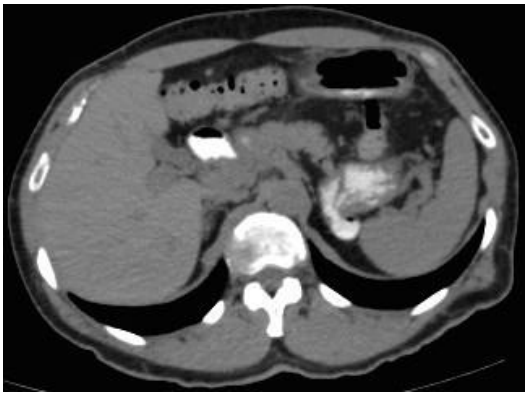

Figure 3: Axial non-enhanced ct image showing an intense lumen staining of both the lesion and the gastric lumen after oral administration of contrast medium.

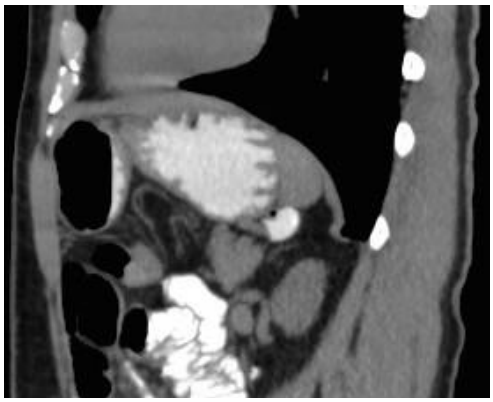

Figure 4: Sagittal reconstruction of the same follow-up ct scan (shown in figure 3) after oral administration of contrast medium.

DISCUSSION

The gastric wall protrudes as the gastric diverticulum (GD). Although GDs are uncommon, they are frequently discovered by accident when doing diagnostic abdominal exams. The prevalence varies between 0.01% and 0.11% during esophagogastroduodenoscopy and 0.04% during upper gastrointestinal tract X-ray examination.

The gastrointestinal tract's least frequent diverticula are GDs. Congenital and acquired are the two primary categories that have been discovered. Rare and typically asymptomatic are diverticula of the prepyloric, pyloric, or gastric antrum areas. This illness is difficult to diagnose because the clinical history can range from total lack of symptoms to dyspepsia to severe upper gastrointestinal (GI) hemorrhage.2.

Because the left adrenal gland is so close to various organs, including the pancreas, the spleen, the gastric fundus, the first loops of the jejunum, and the left kidney, masses that resemble adrenal tumors are more likely to occur on the left side.3. It may be challenging to distinguish left adrenal tumor from conditions like gastric stasis, gastric diverticulum, duplicated bowel loop, accessory spleen, splenic vessels, splenic artery aneurysm, portosystemic venous collater- als (in portal hypertension), left renal and pancreatic tumors, and submucosal gastric tumor.4,5

Thin slices of the adrenal region should be scanned using multirow detector CT with the use of multi-planar reconstruction images to avoid a false positive for an adrenal tumor on CT. Oral contrast medium delivery may be indicated in cases of suspected gastric diverticula.

We conclude that the possibility of gastric diverticulum should be considered in the complete differential diagnosis of adrenal tumors based on our experience.

CONFLICTS OF INTERESTS

We declare there are neither conflicts of interest nor acknowledgements'.

CONSENT

No consent is required to our article publication.

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