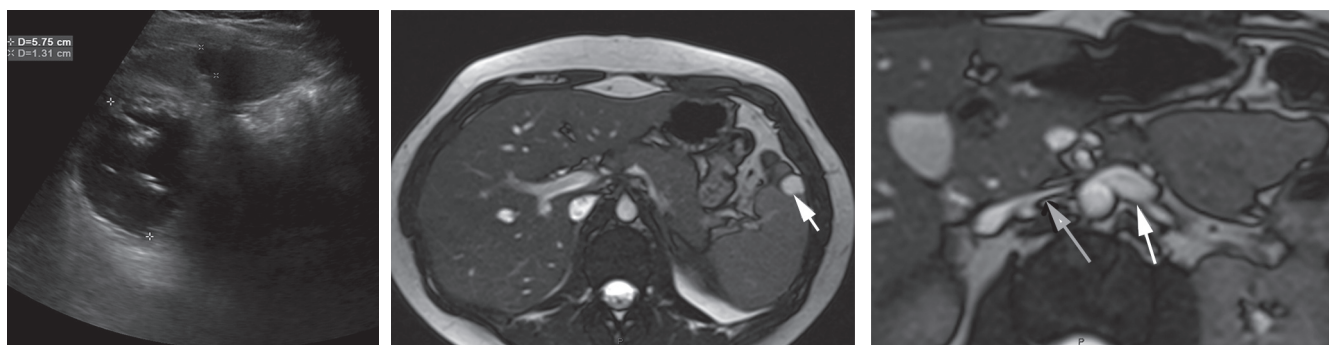


# Vanishing Splenic Cyst - Visible on Ultrasound but Non-Detected on MRI

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A 21-year old female patient was referred for postprandial nausea and vomiting, early satiety and epigastric fullness. No incidents were noted in her medical history. Abdominal ultrasonography (US) detected two cystic lesions in the left hypochondrium, measuring 57 mm and 12 mm (Fig. 1). The inhomogeneous aspect of the larger lesion raised the suspicion of a complicated splenic cyst.

On magnetic resonance imaging (MRI) a single cystic lesion of the spleen was detected, approximately 14 mm in size, located on the anterior surface of the spleen (Fig. 2). The lesion had homogenous content, thin and smooth walls, being interpreted as a primary splenic cyst. A neoplastic or infectious origin of the cyst was excluded. Incidentally, MRI found a dilated left renal vein, compressed between the aorta and the superior mesenteric artery (SMA) (Fig. 3, white arrow). The distance between the aorta and the SMA was 5mm (Fig. 3, gray arrow), lower than normal (between 10 and 28mm).

Due to the discordant results of US and MRI, we repeated the US, this time performed by a more experienced ultrasonographer. After water ingestion, the larger cystic lesion in the left hypochondrium proved to be the dilated stomach. Real time hydrosonography proved also a dilated duodenum that tapered near the SMA. Based on all these findings, the diagnosis of aorto-mesenteric compression syndrome (Wilkie's syndrome) was made.

Aorto-mesenteric compression syndrome is a rare acquired disease, in which acute angulation of the SMA leads to duodenal obstruction [1]. The patient may present with chronic, insidious symptoms [2]. This pathology is suspected on imaging studies when tapering of the third part of the duodenum near the SMA

is seen or when the distance between the aorta and the SMA is smaller than 8 mm and the angle between the aorta and the SMA is acute, with values lower than 15° [3-4].

This pathology is associated with the nutcracker syndrome (compression of the left renal vein between the aorta and the SMA), when abdominal left flank pain and hematuria might be present [5].

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**Conflicts of interest:** None to declare.

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