

Intestinal malrotation associated with duodenal obstruction secondary to Ladd's bands

Dear Editor,

A 38-year-old male sought treatment in the emergency room, complaining of abdominal pain and bloating, accompanied by an inability to pass gas or eliminate feces. The patient underwent multidetector computed tomography of the abdomen and pelvis, with and without the administration of intravenous iodinated contrast media, which showed significant fluid distension of the stomach and duodenum, with abrupt narrowing of the duodenal lumen at the transition from the second to the third portion of the duodenum (Figure 1A). The duodenal arch was short, with a vertical angle of Treitz and all of the loops shifted to the right, together with intestinal malrotation, the cecum and ascending colon appearing in the anterior and medial positions, occupying the mesogastrium (Figure 1B). Those aspects are found in classical malrotation with duodenal obstruction secondary to Ladd's bands (Figure 2A). The patient underwent laparoscopy Ladd's procedure (Figure 2B) and was subsequently discharged in good condition, thereafter reporting no episodes of recurrence^(1,2).

The evaluation of the musculoskeletal system by imaging methods has been the subject of a number of recent studies in the radiology literature of Brazil⁽³⁻⁹⁾. Intestinal malrotation is a rare congenital condition, occurring in 1 out of every 200–500 live births. Most cases are diagnosed during the neonatal period, only 0.2% being diagnosed in adulthood. The condition can lead to chronic nonspecific symptoms in young adults, making it difficult to diagnose^(1,2,10).

Intestinal malrotation typically manifests as nonspecific abdominal discomfort, occasionally provoking abdominal pain related to obstruction of acute onset. Generally, the obstructions occur during the neonatal period and should be considered in all infants presenting with bilious vomiting and abdominal pain^(10,11).

The use of multidetector computed tomography in the emergency room has facilitated the diagnosis of malrotations, primarily in the context of congenital diseases that go undiagnosed until adulthood. This method, in addition to facilitating the evaluation of the loops, can aid in the assessment of the vasculature, which can be affected. Another important imaging method is radiological

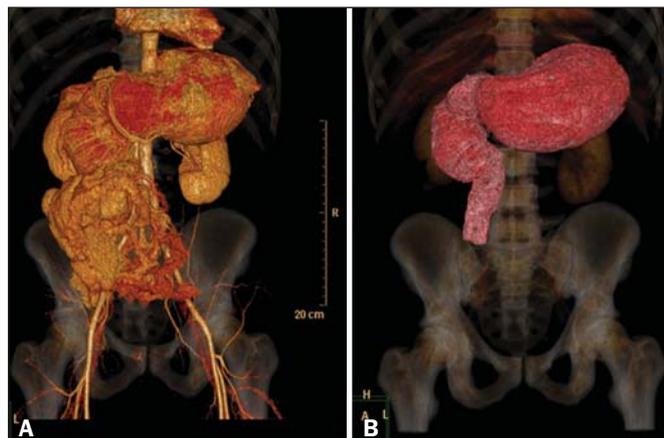


Figure 1. Multidetector computed tomography of the abdomen and pelvis, with three-dimensional reconstruction. Note the major fluid distension of the stomach and duodenum, with abrupt narrowing of the duodenal lumen at the transition from the second to the third portion of the duodenum (A). The duodenal arch was short, with a vertical angle of Treitz and all of the loops shifted to the right, together with intestinal malrotation, the cecum and ascending colon appearing in the anterior and medial positions, occupying the mesogastrium (B).

study with contrast, which can reveal a vertical duodenum and the absence of a duodenojejunal angle, as are observed in 80% of cases^(10,12).

The typical treatment for intestinal malrotation is Ladd's procedure, first described in 1936, which involves classical laparotomy. It is considered the gold-standard surgical treatment in cases of intestinal malrotation and can currently be performed safely by laparoscopy, as in the case presented here. The procedure consists in mobilization of the duodenum and right colon; the sectioning of adhesions (Ladd's bands, sometimes near the superior mesentery); and appendectomy. This aim of the treatment is to reduce the risk of acute-onset volvulus by placing the small intestine in a nonrotating position and broadening the base of the mesentery. Appendectomy is performed because of potential difficulty in diagnosing appendicitis in the future, given that the appendix would be far from the correct position^(1,11,12).

The diagnosis of intestinal malrotation associated with duodenal obstruction secondary to Ladd's bands should be considered in adult patients presenting with duodenal obstruction, a vertical duodenum, and malrotation of the small intestine with the cecum in the medial position. We believe that computed tomography is now the method of choice for the diagnosis of such malrotations.

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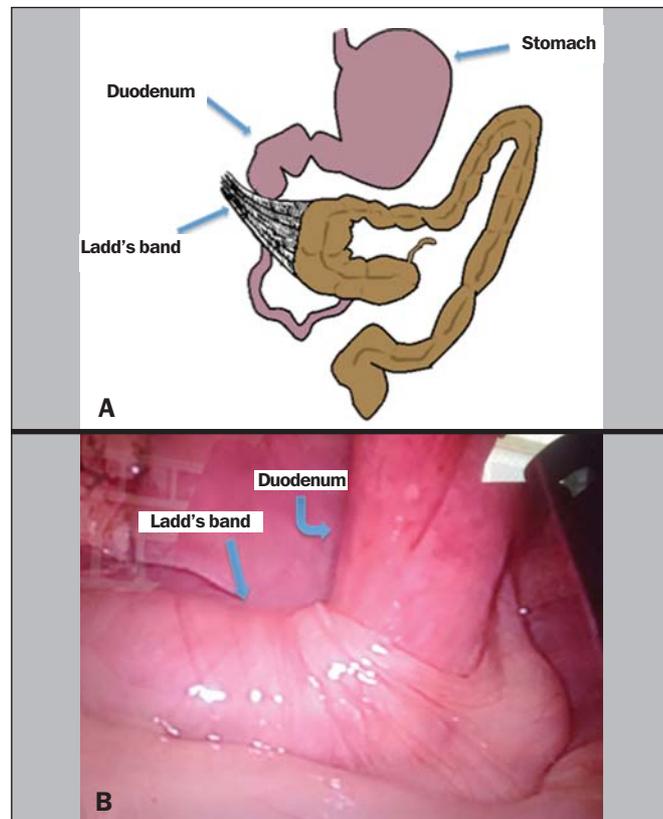


Figure 2. Classical depiction of malrotation with duodenal obstruction secondary to Ladd's bands (A). The patient underwent laparoscopy (Ladd's procedure), which showed a Ladd's band (B).

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Pulse granuloma: a rare condition mimicking a gastric tumor

Dear Editor,

We report the case of a 60-year-old female patient who reported a one-week history of pain in the left hypochondrium, fever, vomiting, and diarrhea. The physical examination and laboratory tests showed no significant changes. Ultrasound showed a septated cystic mass, alongside the stomach, with thick walls and containing debris, although without any vascularity seen on the Doppler flow study (Figure 1A). For clarification, we performed computed tomography (CT), which identified an expansive parietal lesion in the gastric body, measuring 5.9 × 4.5 cm, with contrast uptake by the walls and septa, especially in the portal phase,

together with a hypointense central component without enhancement, suggestive of necrosis (Figure 1B). The diagnostic hypotheses were gastric adenocarcinoma and gastrointestinal stromal tumor. The patient underwent upper gastrointestinal endoscopy, which showed an elevated lesion in the greater curvature of the stomach, with irregular, ulcerated mucosa (Figure 2A). A biopsy yielded inconclusive results, and we opted for resection of the lesion. Histopathological examination of the specimen demonstrated pulse granuloma (Figure 2B). The patient was discharged on the fifth postoperative day, with subsequent outpatient follow-up.

Pulse granuloma is a benign lesion⁽¹⁾ that is extremely rare^(2,3). It was first described in 1969 by Knoblich, who characterized it as lung injury⁽⁴⁾. Lewars described the first oral lesion in

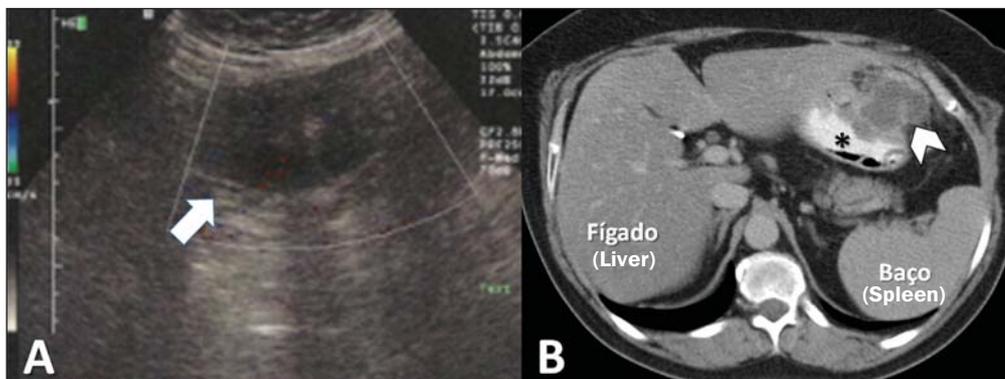


Figure 1. A: Ultrasound showing a septated cystic mass in the left hypochondrium without vascularity on the Doppler flow study (arrow). **B:** CT of the abdomen, showing a mass in the stomach wall (arrowhead). Stomach filled with contrast material (asterisk).

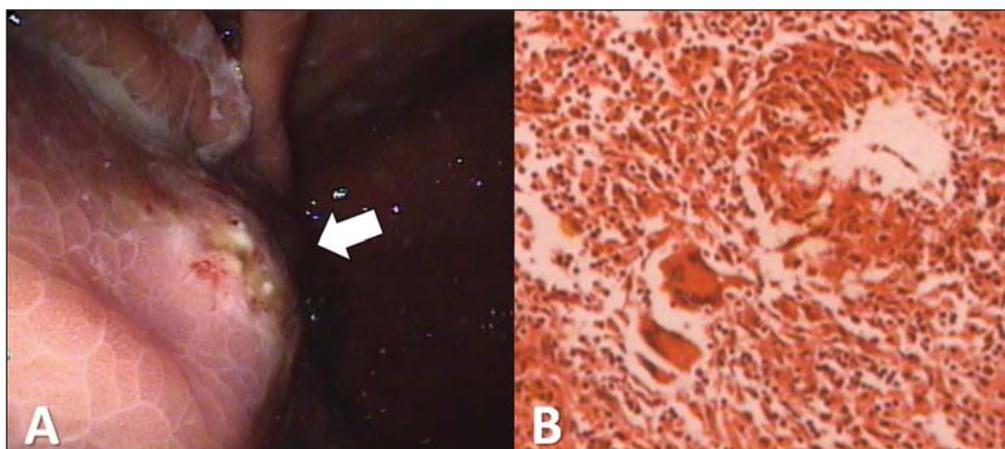


Figure 2. A: Upper gastrointestinal endoscopy showing an expansive lesion with irregular, ulcerated mucosa in the greater curvature of the gastric body (arrow). **B:** Photomicrograph showing a granulomatous inflammatory process, at some points arranged in a palisade, with numerous multinucleated foreign-body giant cells.