Letter to the Editor

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A missed complicated Morgagni-Larrey's hernia

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Dear Sir,

Morgagni-Larrey's hernia (MLH) is a rare variant of anterior congenital diaphragmmatic hernias that may present late in life. It is called Larrey's hernia if it occurs on the left side of the sternum, a Morgagni's hernia if it occurs on the right side, and if the defect is large enough to include both the hiatuses it is termed as MLH [1]. Most of the anterior diaphragmmatic hernias occur on the right side (90%), only 2% occur on the left side, and 8% are bilateral [2]. The contents typically include omentum and colon; left lobe of the liver, stomach, and small bowel is rarely present [3].

A 7-year-old boy presented with colicky abdominal pain and bilious vomiting of 12-h duration. He had right

dismembered pyeloplasty at the age of 6 months for pelviureteric junction obstruction. Clinically, he had mild dehydration and stable vital signs. Air entry was decreased on the left side of the chest, whereas abdominal examination was unremarkable. The routine laboratory workup was normal. Radiography of chest and abdomen showed dilated air-fluid-filled bowel loops in the left hemithorax with displacement of mediastinum to the right side and paucity of gases in the abdomen (Fig. 1a). An initial impression of complicated left congenital diaphragmatic hernia was made. Informed consent was taken from the parents.

After optimization, an exploratory laparotomy was performed through the left subcostal-muscle-cutting incision, which was later converted to Chevron incision type. A large, anterior, central, bilateral defect was noticed in the diaphragm (MLH) with a sac (Fig. 1b). It contained almost all of the small bowel, part of the large bowel, and cecum. The bowel was incarcerated and dense adhesions were observed. After adhesiolysis and complete reduction of the contents, a large seromuscular tear with suspicious viability was noticed in a 10-cm segment of the mid ileum. Furthermore, 30 cm distally, a large subserosal hematoma almost obstructing the ileal lumen was seen. Both the segments were resected and primary end-to-end anastomoses were performed. The sac was excised and

Fig. 1





(a) Radiograph of chest and abdomen: showing gas-fluid-filled bowel loops in the left hemithorax, displacement of mediastinum, and paucity of gases in the abdomen. (b) PERoperative: showing anterior, central bilateral defect in the diaphragm (Morgagni-Larrey's hernia).

MLH may present at different ages with a variety of symptoms. Al-Salem *et al.* [2] reported a mean age at diagnosis of 22.2 months (range: 1–120 months). Respiratory symptoms are more common, but patients may also present with gastrointestinal symptoms or remain asymptomatic and diagnosed incidentally [2,3]. This makes the early diagnosis of MLH quite challenging for the caring physicians.

Although our patient was operated for right pyeloplasty and was in regular follow-up with the pediatric urology team, at retrospective review of his medical record one of the postpyeloplasty abdominal radiography with partial chest exposure was suspicious for bowel herniation into the left hemithorax but it was overlooked. It could be because of the fact that the patient was asymptomatic. An earlier diagnosis and a possible earlier intervention could have reduced the morbidity. It also emphasizes the importance of revising the radiological films in a systematic way so that nothing is missed. A high index of suspicion is required to avoid complications with delayed diagnosis.

Acknowledgements Conflicts of interest

There are no conflicts of interest.

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