

Occlusion on Congenital Mesenteric Bridge in Children: About Case

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ABSTRACT

Introduction: The congenital mesenteric band is related to a mesenteric anomaly occurring during the establishment of the digestive structures in the abdominal cavity. We report a case of congenital band occlusion in a child.

Observation: An 8-year-old girl, with no known history, admitted for diffuse abdominal pain, in whom the clinical examination found an occlusive syndrome. Abdominal X-ray without preparation and abdominal ultrasound revealed haelic and colic type hydro-aeric levels and colic and hail distension. The diagnosis of intestinal obstruction was retained. The biological assessment carried out showed a hemoglobin level of 12g/dl. Platelets were at 170,000. Prothrombin count was at 80%. The ionogram was disturbed with hyponatremia at 119 mmol/l, hypokalaemia at 2 mmol/l. The CRP was at 60 mg/l.

At midline laparotomy, exploration finds a mesenteric flange compressing the ileal loop 80 cm from Bauhin's valve. We sectioned the mesenteric band with the presence of an ileal constrictive zone without necrosis and the release of several bands between small bowels.

Conclusion: Digestive occlusion on a congenital mesenteric band is a rare malformative occlusion whose diagnosis is sometimes not possible by means of imaging.

Keywords

Occlusion, Flange, Mesentery.

Introduction

The congenital mesenteric band is linked to a mesenteric anomaly occurring during the positioning of the digestive structures in the abdominal cavity [1]. We report a case of flange occlusion in a child.

Observation

8-year-old girl, with no known history, admitted for diffuse abdominal pain, in whom the clinical examination found an alteration in general condition, the abdomen was breathing well, slightly distended, with the presence of peristaltic ripples on inspection. A tympanism was noted on percussion of the abdomen

and without a palpable mass. The rectal ampulla was empty on digital rectal examination. Abdominal X-ray without preparation showed small and colonic water levels (Figure 1). An abdominal ultrasound performed revealed colonic and bowel distension, with no visible intraperitoneal effusion.

The biological assessment carried out showed a hemoglobin level of 12g/dl. Platelets were at 170,000. Prothrombin count was at 80%. The ionogram was disturbed with hyponatremia at 119 mmol/l, hypokalaemia at 2 mmol/l. The CRP was at 60 mg/l. The diagnosis of intestinal obstruction was retained. The operation was performed after 4 hours of resuscitation. Exploration finds a mesenteric flange compressing the ileal loop 80 cm from the Bauhin valve (Figure 2). We sectioned the mesenteric band with the presence of an ileal constrictive zone without necrosis (Figure 3) and the release of several bands between small bowels.

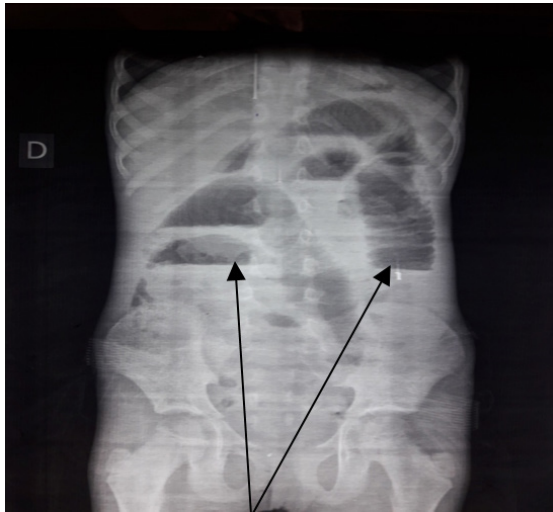


Figure 1: ASP : Water levels of hail and colic type.

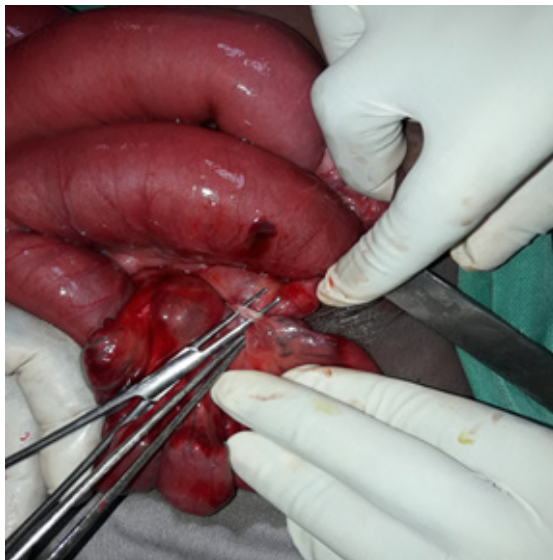


Figure 2: Intra operative image of the mesenteric band.

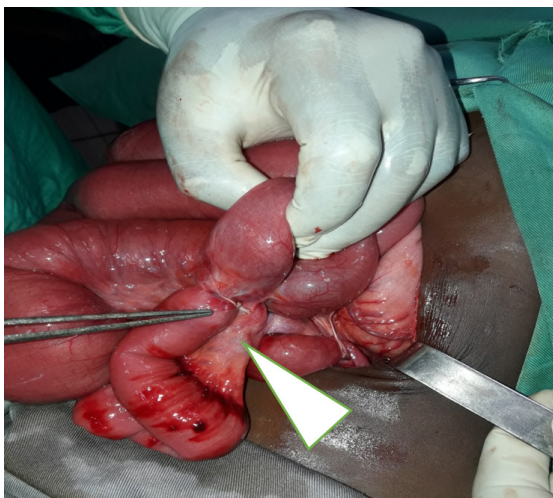


Figure 3: Intra operative image of the ileal constrictive zone.

Discussion

Digestive obstruction on a congenital mesenteric band is more frequent in children than in adults [1]. It is rare and its incidence is unknown. It can occur at any age [2] and at any level of the digestive tract [3]. The congenital flange may arise from embryonic structures [1]. It can result from abnormal joining of the peritoneal layers during embryogenesis [4]. In this case, the omentum, the mesentery, the parietal peritoneum and the digestive tract may be involved in the genesis of the flange, with a predilection for the omentum and the mesentery, the surface of which is very large. The congenital bridle can strangle all or part of the small intestine [5]. It can cause volvulus of the small intestine around its axis [6]. It can crush the small intestine or cause an occlusive bend in the small intestine [5]. The strangulation of the small intestine being the most frequent [1] as the case of our patient. The congenital band can also be responsible for iterative abdominal pain attributed to a functional pathology [7].

The acute clinical picture is characterized by diffuse abdominal pain, vomiting, cessation of transit, significant localized or diffuse defense and diffuse distension of the small intestine [1].

Abdominal X-rays allow to assess the seat and the importance of the distention of the small intestine as well as its evolution as the case of our patient [7]. Computed tomography and magnetic resonance imaging [8,9] show distended small bowel, strangulated, crushed or kinked small bowel loop, small bowel volvulus and bowel ischemia. The color Doppler echo can assess the vascularization of a loop of small intestine whose wall is thickened in search of a slowing down or abolition of the arterial or venous flow indicating intestinal ischemia [10]. Surgical treatment, under laparoscopy or by laparotomy, consists of resecting the bridle and, if necessary, resecting the necrotic small bowel loop.

Conclusion

Digestive occlusion on a congenital mesenteric band is a rare malformative occlusion whose diagnosis is sometimes not possible by means of imaging.

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