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Jejunale Type Digestive Duplication in Children: About 01 Cases

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Abstract **Case Report**

***Introduction*:** Digestive duplications are defined as tubular or cystic malformations, located on a segment of the digestive tract, from the oral cavity to the anus and comprising a wall with a double muscular tunic lined with a digestive-type mucosa. ***Observation*:** 3-year-old child, sex M, with no known history, admitted for abdominal pain that had been present for 3 days, in whom clinical examination revealed an epigastric abdominal mass, tender, firm, fixed in relation to the deep plane on palpation. The abdominal ultrasound performed revealed a loculated cystic mass with finely echogenic content. He underwent surgery. Exploration revealed a digestive duplication of the slender, cystic type at the expense of the jejunum measuring approximately 8x5 cm, located in the mesenteric part of the jejunum and not communicating. We carried out a jejunal resection removing the cystic mass with creation of an end-to-end grelo-intestinal anastomosis. The postoperative course was simple. After 03 months, the evolution was favorable. ***Conclusion*:** Digestive duplications are rare malformations presenting a large anatomoclinical polymorphism. They can sit at different levels of the digestive tract with a predominance of small intestine locations.

Keywords: Digestive Duplication, Jejunum, Child, Bamako.

INTRODUCTION

Digestive duplications are defined as tubular or cystic malformations, located on a segment of the digestive tract, from the oral cavity to the anus and comprising a wall with a double muscular tunic lined with a digestive-type mucosa [1].

These malformations are characterized by a very large pathogenetic, clinical and anatomopathological polymorphism, which can be revealed by banal signs or sometimes by noisy symptoms during a complication (hemorrhage, perforation) [1].

The diagnosis is often made before the age of one year, as no paraclinical examination allows a definitive diagnosis to be made before surgical intervention and an anatomopathological study [1]. We report a 01 case of jejunal cystic digestive duplication in a 3 year old child.

OBSERVATION

3-year-old child, sex M, with no known history, admitted for abdominal pain that had been present for 3 days, of moderate intensity, associated with early post-prandial vomiting of food type, cessation of matter without cessation of gas; in whom the clinical examination found a child in good general condition, afebrile; On examination of the abdomen, we found abdominal distension on inspection, an epigastric abdominal mass, tender, firm, fixed in relation to the deep plane on palpation, and tympanism on percussion.

The X-ray of the abdomen without preparation standing in front revealed an opacity of water tone pushing the loops towards the left (Fig1). Abdominal ultrasound performed revealed a loculated cystic mass with finely echogenic content (Fig2). The biological tests carried out were normal.

He underwent surgery. The exploration found a digestive duplication of the slender, cystic type at the expense of the jejunum of approximately 8x5 cm, located in the mesenteric part of the jejunum (Fig3) and non-communicating. We carried out a jejunal resection removing the cystic mass (Fig4) with creation of an end-to-end grelo-intestinal anastomosis.

The postoperative course was simple. After 03 months, the evolution was favorable.

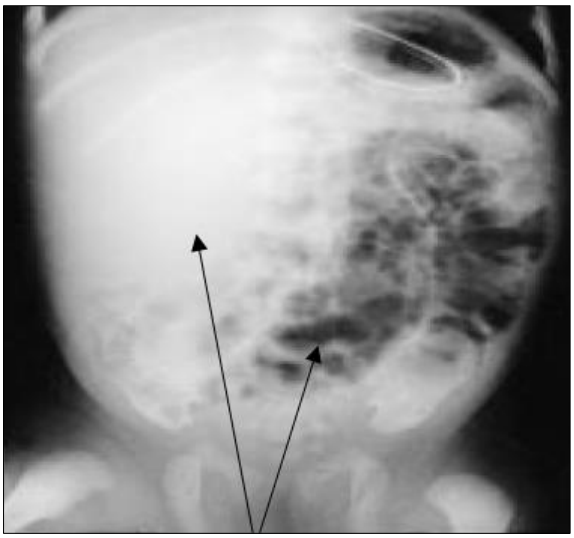

Fig. 1: ASP: Opacity of water tone pushing the handles towards the left

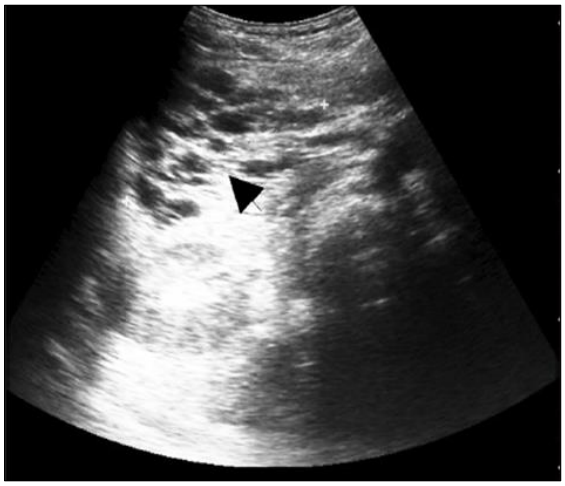

Fig. 2 : abdominal ultrasound: A loculated cystic mass with fine contents

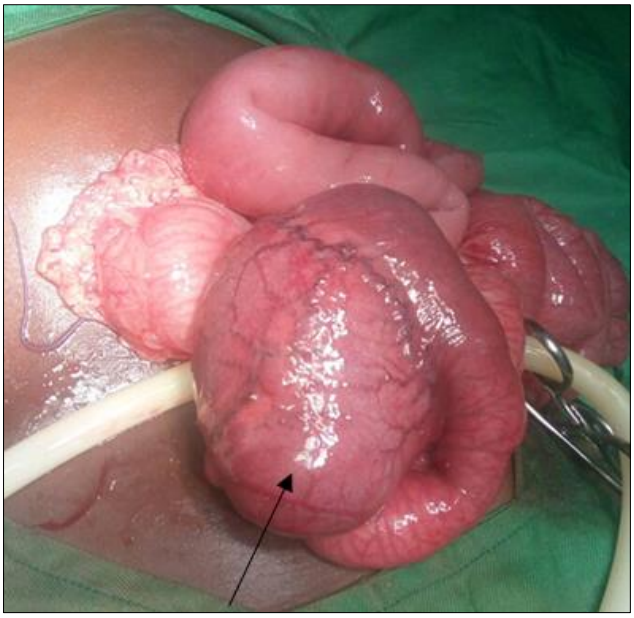

Fig. 3: Jejunal cystic duplication intraoperatively

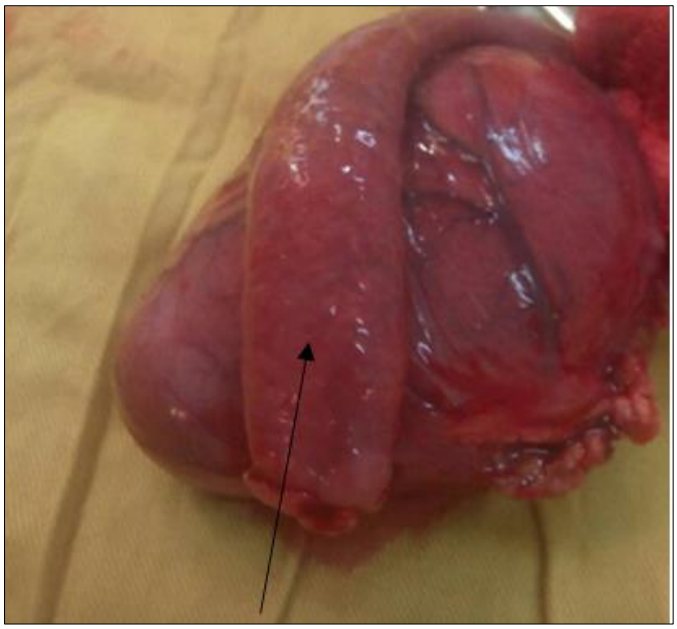

Fig. 4: Intraoperative image of the segmental resection of the jejunum removing the cystic mass

DISCUSSION

Digestive duplications are a rare entity: less than 0.2% of malformations in children [2]. Some forms can remain asymptomatic and only appear in adulthood [3]. Both sexes are affected in the same proportions [4]. This is a condition with early onset since the diagnosis is made before the age of one year in the majority of series [2-4], particularly in series including supra-diaphragmatic forms with earlier onset [4]. If the anatomopathological definition of duplication is unanimously accepted, its pathogenesis remains highly debated. Several theories have been put forward (vascular theory, embryonic differentiation anomaly) [5, 6] without any being able to explain the topographic polymorphism, the association with other malformations and the existence of gastric or pancreatic heterotopia.

The hail location remains predominant in all the writings, 63% [4-6], as is the case in our observation. Tubular forms are more rarely reported [2]. The symptomatology of duplications is very polymorphic and depends on the site. The concept of abdominal mass was reported in all series [4-6], it was 54% for Cooper *et al*., [7].

Any digestive duplication exposes you to complications, sometimes they can reveal the disease [8, 9]. Other complications may occur (perforation, pancreatitis, neonatal respiratory distress, degeneration, etc.) [5], hence the importance of early diagnosis.

Antenatal diagnosis is possible when it is a large cystic form [10], ultrasound is of great benefit for postnatal diagnosis as in the case of our observation, alone or coupled with CT, it often shows images of fluid mass and studies its relationships with neighboring organs [2]. Scintigraphy can detect gastric or pancreatic heterotopia [4-10].

The association with other malformations has been variously appreciated in the literature. Vertebral malformations were the most frequently reported [3-5].

The treatment of these conditions can only be surgical. It depends on the topography and the anatomical aspect of the duplication. The recommended procedure is simple excision of the duplication [11]. In cases where the intercourse is very intimate, this excision removes part of the adjacent intestine followed by an end-to-end anastomosis as in the case of our patient.

CONCLUSION

Digestive duplications are rare malformations presenting a large anatomoclinical polymorphism. They can sit at different levels of the digestive tract with a predominance of small intestine locations. The diagnosis must be made early, before complications occur. The therapeutic procedure can only be surgical and confirmation of the diagnosis is provided by a histological study of the surgical specimen. Apart from complicated or extensive forms, the prognosis for these conditions remains excellent when they are treated in time.

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