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Superior mesenteric artery syndrome: case report

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ABSTRACT

Introduction*: The mesenteric artery syndrome is defined by the extrinsic compression of the third portion of the duodenum between the superior mesenteric artery and aorta. It is a rare entity; fist treatment is medical, but frequently surgery is required.* ***Observation****: We report the case of a 20-year old patient, with five months of continuous epigastric pain. Upper gastrointestinal endoscopy showed a large gastric and duodenal stasis and upper gastrointestinal barium found a D3 stenosis related to a mesenteric artery syndrome. The management consisted of surgical treatment after failure of medical treatment with a favorable outcome.****Conclusion****: The mesenteric artery syndrome is a rare and benign disorder. Medical treatment is tried fist but surgery is common.*

Keywords : Superior mesenteric artery syndrome; Chronic vomiting; Gastro-entero-anastomosis

INTRODUCTION

Aorto-mesenteric forceps syndrome "SPAM" or Wilkie syndrome is the result of compression of the third duodenum by forceps vascular formed by the superior mesenteric artery and the aorta after disappearance of the perivascular fatty tissue [1-4]. It is a rare syndrome that can present in an acute or chronic form. There are favorable factors to know in order to be able to diagnose. Its treatment is primarily medical, but recourse to surgery may prove to be essential.

MATERIALS AND METHOD

Patient and observation:

Patient aged 20, with no particular history, admitted to hospital for epigastric pain assessment evolving for five months, complicated by vomiting food, preferably occurring in the morning when getting up, with very significant weight loss according to the family but not quantified. The patient in fairly good general condition, weighed 42 kg for 1.70 m, with no sign of dehydration. The examination of the abdomen found a lapping fasting. The biological impact report did not reveal any ionic disorders, renal failure or signs of undernutrition. Fibroscopy showed gastric and

duodenal stasis, an aspect of erythematous and atrophic pangastritis, a duodenal stenosis in D3. Gastric biopsies concluded in chronic moderate atrophic gastritis with the presence of Helicobacter pylori. The TOGD objectified a stomach of stasis, and a short stenosis of D3, of 1 cm, evoking a syndrome of the mesenteric forceps (figure 1).

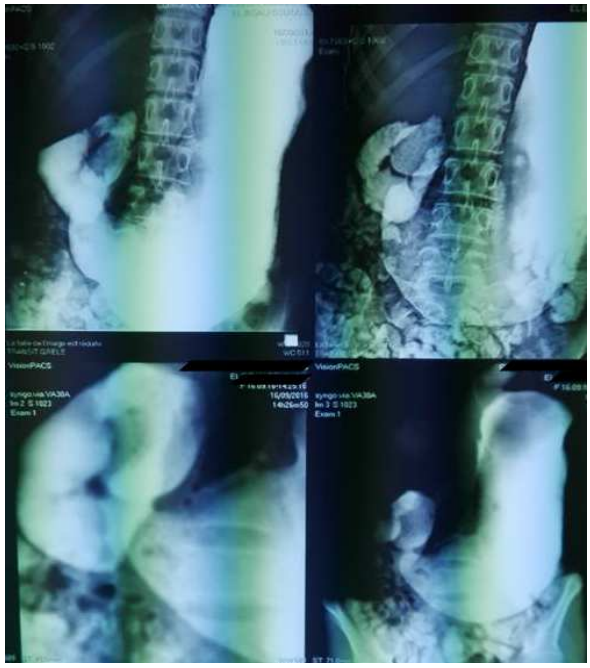

Figure 1: TOGD: gastric and duodenal stasis upstream of a regular duodenal stenosis suggestive of SPAM.

The treatment consisted of medical treatment based on postural treatment in the left lateral decubitus and oral and then parenteral renutrition for 5 days. Due to the non-improvement under medical treatment, surgery was decided. Surgical exploration showed obvious compression of D3 by the aortomenteric forceps and a stasis stomach (Figure 2). Surgical bypass (gastroentero-anastomosis) was performed without incident. Feeding was resumed on D3 postoperative; the patient was discharged on D5 with simple postoperative follow-ups and clinical improvement with a 2-month follow-up.

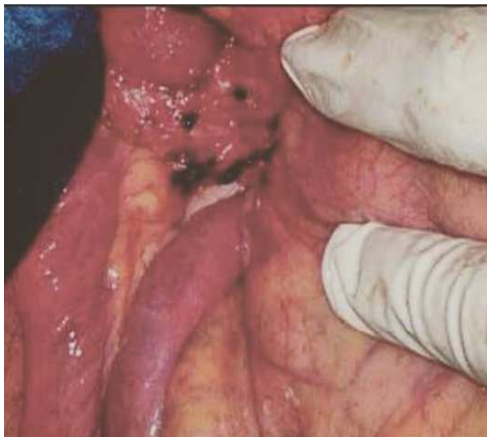

Figure 2: Preoperative image showing compression of the third portion duodenum through the superior mesenteric artery.

RESULTS AND DISCUSSION

Discussion:

SPAM was first described in 1842 by Carl Von Rokitansky. In 1927 Wilkie published the first series of 75 patients, since this syndrome bears his name [1]. This syndrome results from compression of the duodenum by AMS. In the normal state, the duodenum is protected by the peri-vascular fatty tissue, and it is at rapid weight loss (often caused by decompensation of a pre-existing tare) that SPAM occurs [2,4]. Its pathophysiology is linked to a reduced mesenteric aorta-artery distance, less than 8 m m at the height of D3 associated with an aorto-mesenteric angle thus become less than 20 °. Certain favorable factors have been described in the literature, in particular:

Rapide rapid weight loss resulting in the melting of mesenteric fat;

- spinal deformities (spinal hyperlordosis, trauma or spine surgery, correction of scoliosis);
- anatomical abnormalities (shortness or enlargement of the Treitz ligament, an origin of the superior mesenteric artery on the aorta);
- certain system diseases (scleroderma),
- an intervention on the aorta;
- brain motor restlessness;
- the presence of mesenteric lymphadenopathy;
- an abdominal aortic aneurysm;
- an ileo-anal anastomosis, alongside a genetic factor which was recently accused after the description of mesenteric forceps syndrome in members of the same family [5-8]. The diagnosis of mesenteric forceps syndrome is confirmed radiologically thanks to the barium transit which shows [1-2]: stasis and dilation of the stomach, of D1, D2 and D3; an oblique linear stop image at the bottom right of the 3rd duodenum which corresponds to the level of the passage of the superior mesenteric artery; delay in gastric evacuation; clouding of the jejunum is obtained by placing the patient in the left lateral decubitus or in the prone position. Some authors prefer hypotonic duodenography to classical barium transit [5].

The treatment of SPAM is first of all medical, and consists of putting place a nasogastric tube to induce decompression of the stomach and duodenum, put the patient in left lateral position, and above all compensate for hydro disorders electrolytic and establish a double high calorie, enteral diet with a nasal-jejunal and parenteral probe [1-3]. The success in this case is around 72% but with recurrences of around 30% [9]. Failure of medical treatment is pronounced in the absence of improvement in symptoms. No deadline is set for speaking of failure, however the treatment must be maintained between 2 and 12 days, although a treatment that lasted 169 days successfully was reported in a child [1, 9]. Several techniques have been proposed for surgical treatment. Strong's intervention, which consists of a section of the Treitz ligament with lowering of D4, has been proposed in children, but it has a recurrence rate of 20% [3]. The intestinal derotation with creation of a common mesentery is a technique which seems attractive but it involves a significant risk of postoperative occlusion on the bridle [1]. The duodenojejunal or gastrojejunal anastomosis remains the intervention of choice in adults

CONCLUSION:

Mesenteric forceps syndrome is a rare and benign condition which can have serious consequences if treatment is done late. Treatment is medical in the first place, but recourse to surgery is frequent.

REFERENCE

[1] Welsch T, Büchler MW, Kienle P. Recallingn. Superior Mesenteric Artery Syndrome. Digestive Surgery. **2007**;24(3):149-56. PubMed

[2] Roy A, Gisel JJ, Roy V, et al.Superior Mesenteric Artery (Wilkie's) Syndrome as a Result of Cardiac Cachexia.Journal of General Internal Medicine. **2005**;20(10):958- 958. PubMed

[3] karren frederick merrill. Superior Mesenteric Artery Syndrome Treatment & Management. Published Online First: 4 September **2012**.

http://emedicine.medscape.com/article/932220-treatment.**Accessed18Jan2014**

[4] Bauer S, Karplus R, Belsky V, et al. Superior mesenteric artery syndrome: a forgotten entity. Isr Med Assoc J. **2013**;15(4):189-91. PubMed .

[5] Loeb T, Loubert G, Morsly R, Gabillet JM, Pasteyer J. Syndrome de l'artère mésentérique supérieure. Annales Françaises d'Anesthésie et de Réanimation. **1999**;18(9):1000-4.

[6] Welsch T, Buchler MW, Kienle P. Re calling superior mesenteric artery syndrome. Dig Surg **2007**;24:149-56

[7] Gersin KS, Heniford BT. Laparoscopic Duodenojejunostomy for Treatment of Superior Mesenteric Artery Syndrome. J S L S **1998** ; 23) : 281 - 84 .

[8] Ortiz C , C leveland RH, Blickman JG, Jamarillo D, Kim SH. Familial superior mesenteric artery syndrome. Pediatr Radiol **1990**;20:588-9.

[9] Shin MS, Kim JY. Optimal Duration of Medical Treatment in Superior Mesenteric Artery Syndrome in Children. J Korean Med Sci. **2013**;28(8):1220-5. PubMed