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CASE REPORT

MESENTER WITH MEGA-DOLICHOCOLON AND RETRACTILE MESO SIGMOIDITIS AGGRAVATED WITH INTESTINAL OCLUSION

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ABSTRACT

This paper presents the case of a patient aged 42 years diagnosed with intestinal obstruction by volvulus of mega dolichosigmoid with retractable mesosigmoiditis and extensive jejunoileal necrosis. The treatment consisted in reduction of intussusceptions, large jejunoileal resection with lifting of the necrotic segment of mesentery followed by entero-enteral and termino-terminal anastomosys with a monoplane suture in the sero-muscle-submucosal section. There could be seen in microscopic examination that there was a torsion clockwise raging between 180 and the equivalent of two full rotations. Intestinal twisting occurred around its axis making a "closed loop" mesenteric obstruction favored by mesenteric fold that at this level had about 15 cm. The peculiarity of this case was that the association of volvulus with retractable mesosigmoiditis and necrosis of intestinal loops.

KEYWORDS*: mega-dolichocolon, intestinal occlusion, treatment.*

1. Introduction

Anomalies of intestinal rotation are a specific and rare pathology, most often being discovered during surgery. The incidence of these abnormalities is higher in children, especially in their first week of life. Anomalies of intestinal rotation are a specific and rare pathology, most often being discovered during surgery. The incidence of these abnormalities is higher in children, especially in their first week of life. The worst anomaly in such types of rotation is the common mesentery. Stopping the intestinal rotation at 90 °, with the abolition of the abdominal reintegration and of the peritoneal attachments, makes the duodeno-jejunal angle, together with the small intestine, to be found to the right of the superior mesenteric axis, while the entire colon is found to the left of this axis. Therefore, the root of the mesentery Will extend from the right hypochondrium to the left iliac fossa, a situation known as "complete common mesentery [1-3].

Mega dolichocolon is an anomaly characterized by segment or total elongation of the

colon associated with its chronic distention. Retractable mesosigmoiditis is the inflammation of mesosigmoiditis with its subsequent retraction and developing a sigmoid volvulus. The combination of these two forces has resulted into bowel obstruction.

2. Case report

The report presents the case of a 42 years old patient that was admitted to the Emergency Hospital "Sf. Andrei" from Galati, Surgery I Unit. The patient presented severe abdominal pain, epigastric at first and after a period the patient complained about pain around the navel, nausea, vomiting, absent for faecal transit and flatulence for about 24 hours. The patient was conscious, cooperative, easily agitated, presenting tachycardia, hypertensive (BP = 80/60 mmHg) with cold and mottled extremities.

On admission: the abdomen was not moving while breathing, presented idiopathic pain or on palpation, predominantly in the hypogastrium. Throughout his abdomen the patient presented muscle defense. On rectal examination: empty rectal ampulla with pain at the level of thel pouch of Douglas.

Paraclinical examinations: WBC = 25000/mmc with deviation to the left of the white blood cell counts, hypokalemia, metabolic acidosis, increase in the blood urea nitrogen level, elevated transaminases (GOT, GPT), elevated LDH, increased CPK (335 U / l), increased serum amylase , increased D-lactate (bacterial fermentation), hyperglycemia (231 mg / dl).

Other laboratory changes: moderate anemia (hemoglobin 9, 8 mg, Hct-27, 5%, normocytic, normochromic), ESR - 86 mm / h.

Ultrasound examination: shows fibrinoid accumulation in the pelvis, perihepatic and perisplenic. Intestines were inflated and stasic with liquid and gases into mesogaster and the left flank. The pancreas was non-homogenous, poorly visible due to abdominal distension. Moderately distended gallbladder with biliary septic deposit. Liver was micro granular, slightly enlarged. Following emergency surgery the patient was diagnosed with intestinal obstruction by volvulus of dolichosigmoid with retractable mesosigmoiditis and extensive jejunoileal necrosis. Surgical treatment consisted of reduction of intussusceptions, large jejunoileal resection with lifting of the necrotic segment of mesentery followed by entero-enteral and termino-terminal anastomosys with a monoplane suture in the sero-muscle-submucosal section (figures 1 and 2).

Figure 1. *Jejuno-ileal loops in surgery.*

Figure 2. *Jejuno-ileal loops in surgery.*

3. Discussions

Association of the dolichosigmoid with retractable mesosigmoiditis is a rare pathological

association. During surgery we also have found the retractile inflammation of the mesentery, which resulted in segmental ischemic necrosis of jejuno-ileal intestinal loops. There are some other factors that could cause the intestinal obstruction in this patient as:

- dolichocolon with retractile mesosigmoiditis;
- mesentery structure: tall, thin, with an elongated vascular and inflamed shaft;
- transit disorders consisting of irregular ejections, chronic constipation and laxative abuse [4].

All these factors have led to the stagnation of feces in sigma region, which implicitly lead to chronic dilation and elongation of sigmoid colon resulting into a mega-dolicholon. Preoperative differential diagnosis was set as acute necrotic hemorrhagic pancreatitis, perforated ulcer, acute cholecystitis, intestinal obstruction by stenosing sigmoid cancer. During surgery we eliminated the suspicion for mesenteric vascular occlusion with mesenteric infarction [5].

The surgery was associated with drug therapy which consisted in compensation of fluids in the body, electrolyte and acid-base treatment, broad-spectrum antibiotics, vasodilators, anticoagulants and parenteral nutrition for a period of 8 days. During surgery it was found that the jejunoileal necrosis had involved the terminal region of the jejunum and 1 cm from ileum portion together with the mesenteric segment which also presented necrosis. This is the reason why we performed the large jejunoileal enterectomy by lifting the necrotic segment of the mesentery followed by the entero-enteral and termino-terminal anastomosys with a monoplane suture into the sero- muscle-submucosal region [6-9].

In order to achieve anastomosys in maximum safety conditions the viability limit for the intestines to the mesentery occlusion was about 3 cm. after injecting the mesosigmoid with 1% of xyline, 10 ml, sigmoid regained motility and normal color. There was a torsion clockwise raging between 180 and the equivalent of two full rotations. Intestinal twisting occurred around its axis making a “closed loop” mesenteric obstruction favored by mesenteric fold that at this level had about 15 cm. Extensive necrosis was observed in the jejuno-ileal aria with infiltrations of intestinal serohemorrhagic lesions looking like a triangle with the base towards the intestines and the tip towards the base of the mesentery. The intestinal lumen presented transfuses fluid. Dissection revealed involvement of 4 equal vascular jejuno-ileal pedicles. Compared to the first occluded vascular pedicle the jejunal necrosis exceeded 7 cm cranial and to the last occluded ileal pedicle the ileal necrosis exceeded 10 cm. The postoperative evolution was favorable and the patient was discharged after 28 days.

4.Conclusions

Even if the malformation of the mesentery with mega-dolichocolon and retractable mesosigmoiditis is quite rare and prognosis for this patient was quite reserved, the surgery was a success and the patient was discharged in good conditions on the 28th postoperative day.

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