IDIOPATHIC ACUTE GASTRIC VOLVULUS : ABOUT A CASE

VOLVULUS GASTRIQUE AIGU IDIOPATHIQUE : A PROPOS D'UN CAS

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Abstract

Acute gastric volvulus is a rare surgical emergency. Symptoms are frequently non-specific. The most common complications are strangulation and perforation that are life-threatening if not recognized and treated quickly. We report an illustrative case and review the pathogenesis, diagnosis and treatment of this rare entity.

Key – Word : Gastric volvulus; Abdominal pain; Surgical emergency.

Résumé

Le volvulus gastrique aigu est une urgence chirurgicale rare. Les symptômes sont souvent non spécifiques. Les complications les plus courantes sont l'étranglement et la perforation. Elles peuvent engager le pronostic vital en absence d'un diagnostic et traitement rapide. Nous rapportons un cas illustratif et rappelons la pathogénie, le diagnostic et le traitement de cette entité rare.

Mots - Clés : Volvulus gastrique ; Douleurs abdominales ; Urgence chirurgicale.

ملخص

التفاف الحاد للمعدة هو حالة جراحية طارئة و نادرة. الأعراض غالبا ما تكون غير محددة. المضاعفات الأكثر شيوعًا هي الاختناق وانثقاب المعدة التي تهدد الحياة إذا لم يتم التعرف عليها وعلاجها بسرعة. نقوم بالإبلاغ عن حالة توضيحية ونراجع التسبب في هذا الكيان النادر وتشخيصه وعلاجه.

الكلمات المفاتيح : انفتال المعدة ; آلام البطن ; الطوارئ الجراحية.

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INTRODUCTION

Acute gastric volvulus is a rare disease [1]. The clinic remains non-specific [2]. We report the acute form of idiopathic gastric volvulus in a 42-year-old woman, revealed by a state of shock with a peritonitis, diagnosed and confirmed intraoperatively.

CASE REPORT

A 42-year-old patient with a history of thyroidectomy, adrenal insufficiency and sigmoid volvulus treated medically, presented with an acute abdominal pain, a cessation of matters and gas and a meteorism, evolving for 24 hours.

On admission, the patient was agitated, pale, polypneic, dyspneic with desaturation at 91% on ambient air. He was tachycardic with hypotension at 90/60 mm Hg. She had abdominal distension with generalized defense, diffuse tympanism and abolition of hydro-aeric noises. The Abdominal X-ray (without contrast) showed a higher-than-wide hydro-aeric level taking up almost the entire abdomen. Non-injected pelvic abdomino computed tomography have showed an aspect in favor of a perforation of a hollow organ with significant pneumoperitoneum and intraperitoneal effusion. It was a generalized peritonitis secondary to a perforation of a hollow organ complicated by a state of shock with multi-visceral failure. The therapeutic management consisted of resuscitation conditioning, oxygen therapy in spontaneous mode, filling with recourse to norepinephrine, antibiotic therapy based on of claforan, flagyl and gentamicin and urgent surgery. Intraoperatively, the surgeons observed a volvulus of the stomach perforated at its posterior surface with extensive ischemia of the greater curvature complicated by purulent peritonitis. There was also hyper laxity of the gastro-splenic and gastro-phrenic ligaments with the possibility of easy lowering of the cardia. more than 10 cm from the esophageal hiatus. The surgical act consisted of a total gastrectomy with abundant peritoneal cleansing.

The postoperative course was unfavorable with the persistence of septic shock, an increase in sepsis markers and worsening of renal and respiratory failure, rhabdomyolysis and metabolic acidosis. She developed hematologic failure requiring a transfusion of red blood cells and fresh frozen plasma; hepatocellular insufficiency with factor V lowered to 18%, hyper ammonemia and increased cytolysis. After four days of hospitalization, the patient died in very serious conditions of multiorgan failure.

DISCUSSION

The broadest definition of gastric volvulus is that of Watell [2] which encompasses all abnormal rotations of the stomach due to the solidity of its means of attachment. However, its frequency is probably underestimated because self-limiting forms are possible [1]. Four anatomical forms of gastric torsion can be reported, of which two are main. The first is called organo-axial. Its rotation takes place around the cardio -pyloric axis and produces a true volvulus. The second type called mesenteric-axial. It occurs along the horizontal axis joining the middle of the two gastric curvatures [2,3]. Gastric volvulus is a rare condition, from 1985 to 2008 only 757 cases have been published worldwide [4]. It is especially the prerogative of elderly subjects with a peak frequency around fifty [4-6]. Gastric volvulus also affects children [4-8] with an average age of 2.5 years [7,8]. Young adult cases have also been reported [4,5]. There are two types of gastric volvulus. The primary form observed in 30% of cases [9], is linked to laxity of the means of fixation of the stomach [1]. It can also be secondary to other conditions [9] as like as diaphragmatic eventration coming in second position after the hiatal hernia [4].

The clinical picture is sometimes evocative when it carries out a characteristic triad of Borchardt [1] including major epigastric pain with radiation to the back and/or the hypochondrium and/or the left hemithorax, ineffective vomiting efforts, absolute food intolerance with difficulty or impossibility of inserting a gastric tube. However, the clinic remains non-specific [2]. Common complications of acute volvulus are strangulation and puncture. Vascular threat can rapidly lead to gangrene is seen in 5–28% of patients with acute strangulated gastric volvulus [2,6]. Digestive perforation with an array of mediastinitis or peritonitis leads to rapid death in an array of cardio-respiratory distress with irreversible hypovolemic and septic shock [9,10].

The Abdominal X-ray (without contrast) can show gas distension of the upper part of the abdomen, retro-cardiac fluid levels in case of associated hiatal hernia, and sometimes emphysema of the gastric wall [1]. Digestive opacification examinations are specific but often difficult to perform [1]. Computed tomography currently occupies an important place in the positive diagnosis, thanks to

the multi-planar reformations [1,4]. The treatment of gastric volvulus is surgical. Laparotomy is the most used route. It allows wide access to the abdominal cavity [4]. Reduction of the volvulus or gastropexy under endoscopic guidance is only conceivable in the absence of signs of necrosis or gastric perforation [4]. Without treatment, the mortality rate of acute gastric volvulus is 30–50% [2,6].

CONCLUSION

Gastric volvulus is a rare condition that requires rapid diagnosis and urgent surgical intervention to reduce mortality rates. Early recognition is key to improving outcomes.

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