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Case Report

Management of a Volvulus of the Sigmoid Colon at the Somine Dolo Hospital in Mopti About a Case

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Abstract

We report a case of spontaneous devolvulation of the sigmoid colon in a patient following a delay in preparation for medical and surgical management. The aim of this work was to bear witness to the precariousness of health coverage in certain areas of our country that have suffered from military and community crises (Djénné, Bandigara, Koro, etc....). This was a clinical observation where the signs were dominated by a passage of faecal matter and flatus, vomiting, abdominal pain and air fluid levels. Erect X-ray abdomen helped in confirmed the diagnostis The patient during his preparation had made a spontaneous devolvulation followed by a complete remission of the clinical symptoms. He returned 3 monts later with the same symptomatology following which the emergency medical-surgical treatment was based on resuscitation measures and laparotomy with resection of the sigmoid colon followed by colorectal anastomosis, termino-terminal.

Keywords: Volvulus; Sigmoid; Management; Somine Dolo Hospital

Introduction

The volvulus of the sigmoid is a medical-surgical emergency. It occurs as a result of rotation of the loop around its own axis, manifesting itself by a cessation of intestinal transit (faecal matter and flatus), abdominal pain and vomiting. It is a relatively rare condition, representing 2-4% of acute intestinal obstructions [1]. The diagnosis can be clinical (sign of intestinal obstruction) and/or radiological (air fluid level). The timely of the management is medical-surgical determines the vital prognosis, since it can lead to colonic necrosis with the risk of a stercoral peritonitis. The aim of our work was to testify the precariousness of the sanitary coverage in some areas in Djenne, Bandiagara and Koro.

Case Presentation and Investigations

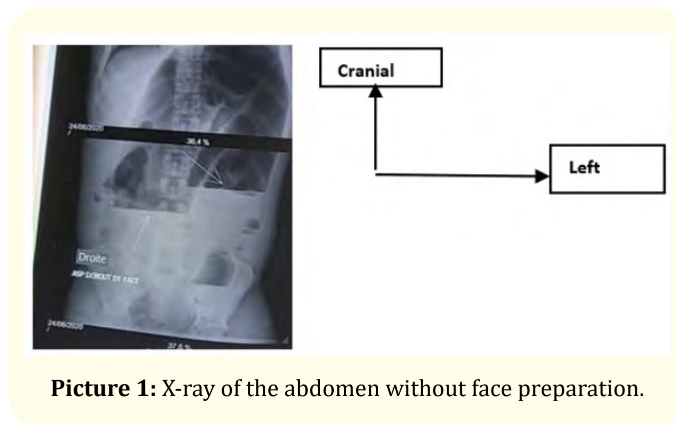
M.BD, aged 29 years, male, farmer, married, admitted on 14/09/2020 to the Sominé Dolo hospital in Mopti in the emergency

department for abdominal pain and distension. On questioning, the history told us that this patient had consulted the Djenné reference health centre (a circle in the Mopti region) on 24/06/2020 for sudden abdominal pain more accentuated in the left flank, of moderate intensity, without any triggering factor or painkiller, accompanied by food vomiting and a cessation of faecal matter and flatus. On physical examination, there was tympany in the abdomen associated with abdominal guarding, and on rectal examination the rectal ampulla was empty and the finger pad was clean.

The general condition was preserved with a blood pressure of 120/80 MmHG, a pulse of 90 beats/mm, the conjunctiva well coloured.

The diagnoses of sigmoid volvulus and colonic tumour had been evoked.

The erect X-ray adomen showed air fluid levels (see Picture 1) in favour colon volvulus.

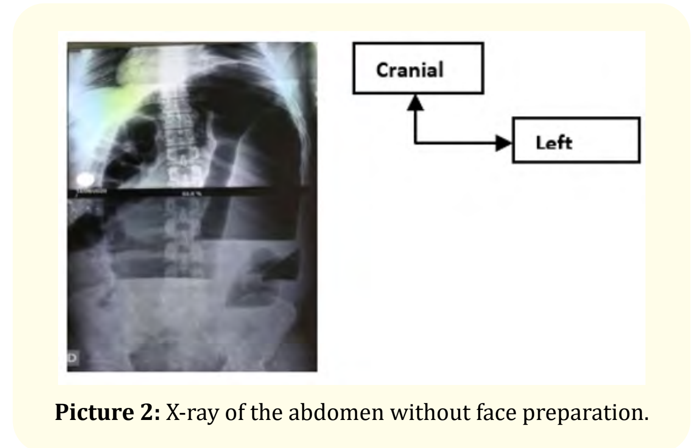


Picture 1: X-ray of the abdomen without face preparation.

Due to financial constraints, the patient and his family signed a discharge to go home.

The same symptomatology had started at home, on 10/09/2020, marked by pain in the left flank associated with vomiting and a cessation of faecal matter and flatus, which led them to consult the Sominé Dolo hospital in Mopti.

Received on 14/09/2020 in the emergency department of the said hospital, for pain and cessation of faecal matter and flatus, a temperature of 37.7°C, blood pressure of 110/60 mmhg, well coloured conjunctiva, a notion of chronic constipation was found in the history. On clinical examination, there was abdominal tenderness on the left flank, tympany, and an accentuation of abdominal noises. The erect X-ray abdomen, standing upright, found a large arch with air fluid levels (see Picture 2).



Picture 2: X-ray of the abdomen without face preparation.

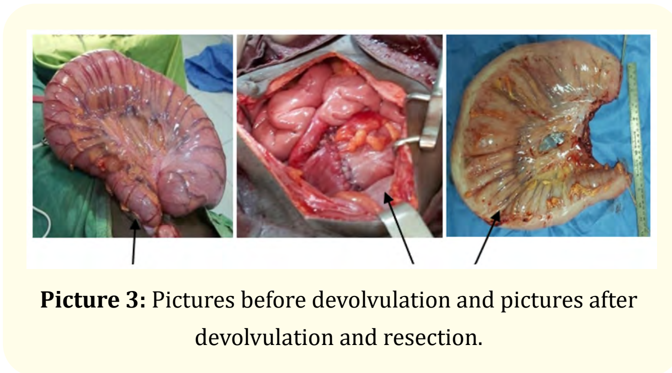
In view of these clinical and radiological signs, the diagnosis of a sigmoid volvulus occlusion was evoked.

The patient was group B, rhesus positive, blood glucose was 7.5 mmol/l, creatinine was 9mg/l, leukocytes were 9000/mm^3 with a predominance of neutrophils, haemoglobin was 12g/dl, haematocrit 39%. On rhesus grouping, blood count and formula, blood glucose and creatinine in emergency, surgery was decided.

The treatment started on 14/09/2020 with a short medical resuscitation made of correction of hydro-electrolytic disorders based on infusion of lactated ringer's solution and sodium chloride, an antibiotic therapy based on ceftriazone 2 grams and metronidazole 1gram in infusion.

Under general anaesthesia associated with orotracheal intubation, we performed a median laparotomy above and below the umbilical. On exploration we found a torsion of the sigmoid loop with 2 turns of spiral without necrosis. The surgical treatment consisted of devolving the sigmoid colon, anal emptying of the colon followed by resection of the sigmoid colon with colo-rectal anastomosis, termino-terminal, associated with abdominal cleansing, drainage of the cul de sac of Douglas, plane by plane closure and dressing (See Picture 3).

Postoperative resuscitation was continued with 3 litres of saline, lactated ringer and saline combined with antibiotic therapy with



Picture 3: Pictures before devolvulation and pictures after devolvulation and resection.

metronidazole 1 gram twice and ceftiazone 2 gram per day and analgesics with paracetamol and morphine. These resuscitation measures were continued until the patient's remission with fluid feeding on the third day of surgery and discharge on the tenth day. The postoperative follow-up at 6 months and then at 1 year was unremarkable.

Discussion

Sigmoid volvulus was the most common cause of colonic strangulation occlusions. In adults, it accounted for 2-4% of acute intestinal obstructions [1,2]. The majority of patients with sigmoid volvulus had colonic motor disorders such as constipation [3,4]. Some authors considered sigmoid volvulus to be an expression of Hirschsprung's disease [4]. Our study, like that of Ba P. A [5], demonstrated the predominance of this condition in young adult males, unlike in the West, where elderly subjects were the most affected. The general condition of the patient was preserved as found in the literature [5], this condition was explained by the early consultation of our patients within an average of 3 days. The medical and surgical history was dominated by constipation in our case, which could be explained by a diet mainly based on rice. Pain, the main symptom being the torsion of the vascular-nervous bundles at the level of the sigmoid mesocolon and distension with abdominal asymmetry were the signs of appeal.

The erect X-ray adomen was very useful because of its rapidity of execution in objectifying a gaseous hoop and air fluid levels on the one hand and on the other hand to rule out certain differential diagnoses of colon tumour. We did not use abdominal TDM because of the unavailability of this examination.

Our treatment, unlike some authors who used endoscopy, devolvulation, coloexsufflation, colonic lavage and aspiration, sigmoidopexy, resection with Hartmann colostomy and non-operative treatment in the absence of signs of intestinal distress by detorsion with a Faucher-type rectal probe [6-8], was surgical. A Median laparotomy above and below the umbilical with sigmoidal resection and colorectal anastomosis in one stage. The use of colostomy after resection [5] was justified by the fact that he recorded 28% necrosis of the loop unlike in our case, but also by the sample size, the young age of the patient and his good general condition, the condition of the loop without necrosis and our experience.

Spontaneous resolution or devolvulation of sigmoid volvulus is a rare and unpredictable phenomenon and has been observed in our case and in [5] although we cannot explain it. The postoperative period marked by the presence of pain at the operative site, which was observed in some authors [5], was not observed in our patient. Suppuration of the surgical wound and post resection-anastomosis digestive fistula were found in the literature with a mortality rate of 10% [7,9].

Conclusion

The perpetuation of a good sanitary coverage would make it possible to raise the quality of care in our structures. The volvulus of the sigmoid would remain a medical-surgical emergency whose prognosis is closely linked to the speed of management and the technical platform.

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