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Case Report

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OGILVIE'S SYNDROME POST CAESAREAN SECTION: CASE REPORT AND REVIEW OF LITERATURE

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ABSTRACT

Ogilvie's syndrome or Acute colonic pseudo-obstruction is a rare condition characterized by symptoms of a large bowel obstruction in the absence of a mechanical cause. The physiopathology of Ogilvie's syndrome remains unknown. It was associated with some particular conditions including recent surgery especially Caesarean section, infection, or an underlying illness. The diagnostic is confirmed with the combinaison of low intestinal obstruction symptoms , associated with a large caecum without pathological lesion showed by Xray. The diagnosis should be fast to avoid caecal perforation that occurs in 25 to 40 percent of the cases and could be responsible of a significant mortality rate. The treatment is essentielly conservative, but surgical management is necessary in case of a complication. The objective of our study is to identify clinical and radiological signs of the post-caesarean Ogilvie's syndrome in order to establish the appropriate treatment with no delay. We report a case of Ogilvie's syndrome after cesarean section, which has been treated by surgery.

KEYWORDS: Ogilvie's syndrome, Acute pseudo-obstruction of the colon, Caesarean section, Postpartum.

INTRODUCTION

Ogilvie's syndrome or acute colonic pseudo obstruction (ACPO) is a rare entity, that was first described by Sir Heneage Ogilvie in 1948,[1] it corresponds to a distinct form of colonic dilatation usually involving caecum and ascending colon, without evidence of underlying mechanical or anatomic cause. The physiopathology is incompletely understood, but is thought to be related in part to a disturbance in the autonomic innervation of the distal colon.[2] If detected early the therapeutic management is initially conservative However surgical colonic decompression is requiered when the caecum is dilated >12 cm, or after the failure of conservative management as it reduces the risk of ischaemia and perforation, which can be related to a mortality range of 40% to 50%.[2,3] Therefore the early diagnosis and rapid treatment is necessary to avoid complications of this serious condition. We report a rare case of Ogilvie syndrome post ceasarean section, with massive ceacal dilatation >15cm, leading to urgent laparotomy.

CASE REPORT

A 24 years old, without notable pathological history, gravida 1 parity 1, underwent a caesarean section at 40 weeks and 6 days of her pregnancy for acute fetal distress under spinal anesthesia. there were no intra-operative complications, the pelvic organs appeared normal, no electro coagulation instruments were used , the blood loss was less than 500 ml. On day 2 after Caesarean section, the patient complained of abdominal pain and distention with reccurent vomiting, she was passing flatus but had not opened her bowels. Clinical examination noted a temperature of 38°C and heart rate of 110Beats/min, the abdomen was very distended and tympanic, with generalized tenderness elicited all over her abdomen. Blood tests revealed an hyperleucocytosis of 17,7 × 109/L and elevated CRP of 117 mg L. On imaging, abdominal X-ray showed distended small and large bowel with air-fluid levels the abdominal CT scan demonstrated significant dilation of the caecum >15cm , associated to a dilation of the large and small intestine with no mechanical obstruction or other pathology (Figure 1). A nasogastric tube was placed for decompression, and the patient was placed on IV fluids and food restriction. The patient underwent an emergency laparotomy because of the huge dilation of the caecum >15cm, exposing her to an enormous risk of perforation. The findings included dilated large and small bowel, with massive dilation of the caecum>15 cm with important thinning of its wall, with no mechanical or anatomic obstruction (Figure 2,3). We proceeded to an hemicolectomy, with a lateral loop colostomy on rod the post operative evolution was favorable, with full recovery after colonic re-anastomosis 3 months later.

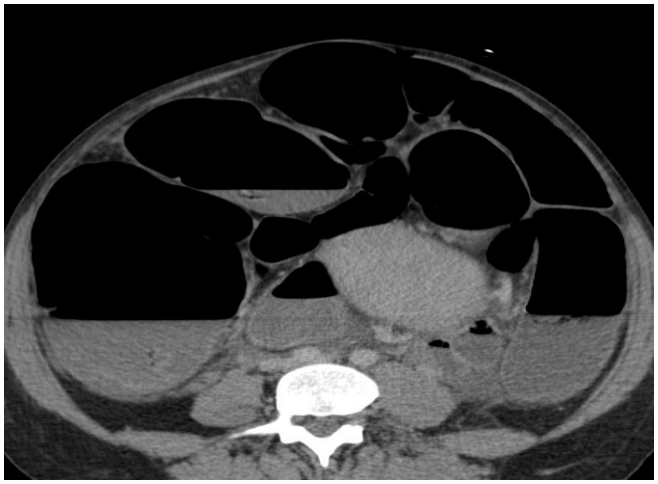

Figure 1: Abdominal computed tomography scan revealing massive dilation of the large and small bowel with air fluid levels.

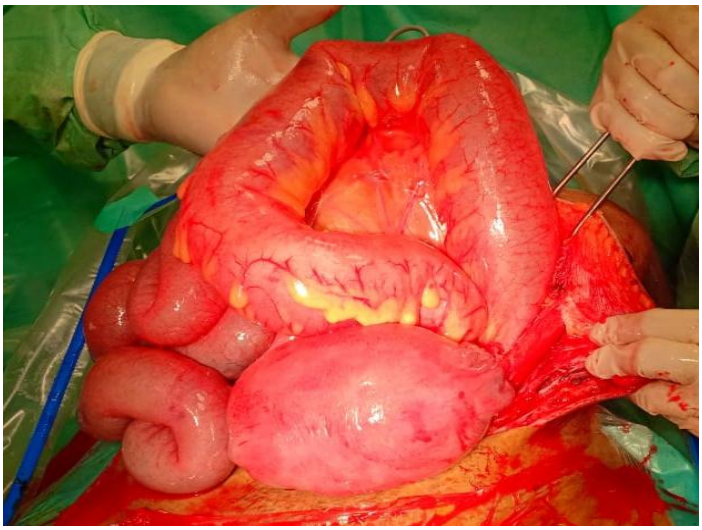

Figure 2: Peroperative image showing massive dilation of the ascending, transverse, descending colon, and also the small bowel, on a puerperal uterus.

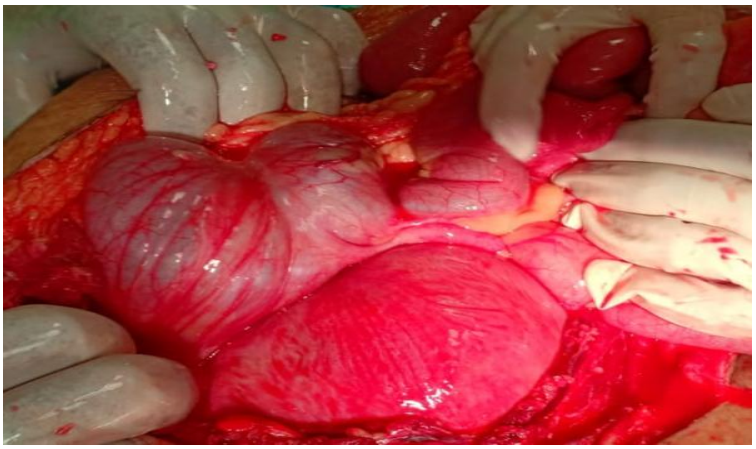

Figure 3: Massive dilation of the caecum > 15 cm, with a thinning of its wall, exposing the patient to important risk of caecal perforation.

DISCUSSION

Ogilvie's syndrome is a rare clinical entity that usually appears after abdominal or pelvic surgery, or after a traumatism. Among all surgical interventions, the Caesarean section is the most common surgical procedure associated with this syndrome.[2,4]

The physiopathology of Ogilvie's syndrome remains uncertain, but it was hypothesized that the imbalance of sympathetic and parasympathetic innervation of the colon would create a functional obstacle between the two innervation territories of the colon, leading to an expansion of the colon, with hyperpressure and interruption of the capillary circulation, responsible of a parietal ischemia, necrosis and then perforation. This one is located preferably in the caecum, because it is the part of colon with the thinnest wall and largest diameter. Regardless, the true pathogenesis of the syndrome, it is thought to be multifactorial.[2,3,5]

The symptoms are often typical of low bowel obstruction, meteorism and abdominal distension, with hyperactive bowel sounds, are the most common signs. Often, it is associated with constipation, nausea and vomiting, with low grade fever . In addition, the patient may still be able to pass small amount of fecal fluid and flatus.[2,5] Symptoms are most often gradually established within the first 2 to 12 post-operative days. Clinical examination may show distended and tympanitic abdomen, with moderate tenderness and abnormal bowel sounds. For some authors, the onset of pain in the right iliac fossa indicate a cæcale perforation which represents the major risk even after several days of favorable evolution.[5,6] This risk increases with a caecal diameter>12 cm or if the distension has lasted more than six days. The risk of spontaneous perforation is about 3% yet the mortality rate in case of perforation is about 40% to 50%.[2,3] The main differential diagnosis is the paralytic ileus. The evocative clinical argument is the absence of bowel sounds in this syndrome, while they are abnormally increased in the Ogilvie syndrome.[6,7]

There are no specific biological abnormalities. However, an abnormal increase of white blood cells (leukocytosis) is found in 27% of uncomplicated cases and in 100% of patients with a caecal perforation. Plain Abdominal X-ray is the best diagnostic modality to reveal this pathology, as is the case of our patient, it highlighted an important colon distention, associated with air fluid levels.[9] The persistence of colon haustra, rectal gas, and the inconstancy of air-fluid levels are the signs of functional occlusion. Computed tomography (CT) scan with contrast injection can be performed to eliminate some differential diagnoses such as mechanical obstacle, sigmoid or caecum volvulus, fecaloma or peritonitis.[2,9]

It is a therapeutic emergency, the purpose of the treatment is to reduce the distension in order to avoid a secondary perforation. Therapeutic indication depends on the patient general condition, the size of the caecum on imaging, and the presence or not of cæcale perforation signs. Medical conservative treatment combines fasting, insertion of a nasogastric tube, correction of the electrolyte disorders, the suppression of predisposing factors. In the case of no improvement, pharmacological decompression could be started, using neostigmine, which can promote colon motility by inhibiting acetylcholinesterase. On account of its adverse effects, this treatment requires a strict clinical and electrocardioscopic control. The endoscopic colinic decompression allows the caecal diameter to collapse by aspiration of air and colic stasis content. It is considered as a safe and less invasive procedure, and represents the treatment of choice when there are no signs suggestive of perforation or peritonitis. It is succesful in 68 % to 95%,[2,3,7] but the reccurence is commun. If pharmacological and endoscopic decompression failed or signs suggestive of perforation exist, then surgical intervention should be considered in the form of caecostomy, hemicolectomy with or without primary anastomosis, and resection of the ischemic or perforated segment of the bowel.[2,3,8]

In practice, if the caecal diameter is less than 9 to 12 cm, the medical treatment should be a first-line approach. Otherwise surgery is recommended in case of a medical treatment failure, progressive clinical deterioration, the presence of signs of ischemia and perforation, or if caecal diameter>12 cm. Our patient had a caecal dilatation > 15cm, a surgical treatment was indicated. A laparotomy with an hemicolectomy and a lateral loop colostomy on rod, were done in collaboration with the visceral surgeon.[2,3,7,9]

Ogilvie Syndrome is a postoperative complication with a good prognosis, but a high morbidity, ischemia or perforation occurs in 3 to 15% of cases with an associated mortality that has an upper range of nearly 50%. In addition to colonic ischemia and perforation, risk factors for mortality in the setting of Ogilvie syndrome include advanced age, cecal diameter >14 cm, persistent colonic distension for >4 days, and requirement for operative intervention.[2,9,10]

CONCLUSION

Ogilvie's syndrome is a rare entity that is characterized by acute dilatation of the colon without any mechanical obstruction. If not diagnosed early, Ogilvie's syndrome may cause bowel ischemia and perforation .It is important to maintain a high index of suspicion for the post Cesarean Section patient, presenting a progressive abdominal distension, despite the presence of falsely reassuring bowel sounds and passage of flatus. Conservative treatment is a successful first-line approach, but should not delay surgical management if proved to be necessary.

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