Chapter 103

Cesarean birth Ogilvie Syndrome: a case report

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ABSTRACT
The intestinal motility disorders during pregnancy may present adynamia, which may be confused with intestinal occlusion symptoms. Most of the time the benign evolution, however, may also show the intestinal pseudo-obstruction, also known as Ogilvie Syndrome, first described by the surgeon Heneage Ogilvie in 1948, through specific signals and symptoms and radiological findings, such as abdominal distention, nausea, vomiting, and colon dilation, simulating intestinal occlusion with no apparent mechanical cause. In the case reported, the patient was a 32-year-old breastfeeding woman, with postpartum complications, who developed Ogilvie Syndrome, in which the late diagnosis resulted in an acute intestinal pseudoobstruction of the colon after having undergone emergency surgery. This report aims to emphasize such syndrome among the postpartum complications diagnosed, following surgical delivery, so that early treatment and medical assistance may be provided to the patient, avoiding any unwanted outcome.

Keywords: Ogilvie Syndrome, intestinal pseudoobstruction, cesarean section.

1 INTRODUCTION

Intestinal motility disorders in pregnancy can be expressed as adynamia, which is confused with intestinal occlusion. Most of the time, of benign evolution, however on rare occasions arises the Syndrome of pseudo-intestinal obstruction or also called Ogilvie Syndrome. This was described for the first time by the surgeon Heneage Ogilvie in 1948.[1,4] He characterized the syndrome through signs and symptoms and radiological appearance characteristics, such as colon dilation, and simulating intestinal occlusion, without a visible mechanical cause, due to excessive parish supply and stimulation of the sympathetic, causing colonic atony. Its exact incidence is not known, but it is known that Ogilvie Syndrome predominantly affects the elderly, men, hospitalized patients, or institutionalized.[1]

The syndrome in question is a rare finding that usually occurs after surgical procedures, such as orthopedic, neurological, and gynecological surgeries so these constitute one of the main risk factors for pathology.(2) The syndrome is manifested in nausea, vomiting, acute abdominal distention, and stopping the elimination of feces and gases. On physical examination, the abdomen is painful, and tympanism to percussion, involuntary muscle contracture, with mild to moderate sensitivity and absence of bowel sounds on auscultation. Such findings usually manifest in about 2 to 12 days in postoperative cases, confusing with mechanical obstruction of paralytic ileus.(3) In relation, to abdominal distention, it is possible to visualize the distension of loops on radiological examination of the abdomen (crucial complementary examination), but it is not visualized fluid levels that are typical of mechanical obstructions.(4)

2 GOAL

To report the case of a postpartum woman with a postpartum cesarean section complication, who developed Ogilvie Syndrome, whose late diagnosis culminated in acute intestinal pseudoobstruction of the colon and subsequent emergency surgery.

3 METHOD

This article was conducted in a University Center of the State of Alagoas, according to normative instruction 466/2012, and was forwarded for evaluation by the Research Ethics Committee of that institution.

The information contained in this work was extracted through the review of medical records, interview with the research participant, photographic record of diagnostic methods, to the which research participant was submitted, and literary review.

4 CASE REPORT

4.1 ANAMNESIS

G. M. A. M, female, 32 years old, married, brown, primiparous at 39 weeks of gestation (evidenced by obstetric ultrasound), entered the emergency room of a hospital private with clinical evidence of prodromes of labor and fetus-pelvic disproportion. He denies other complaints. G1P0A0 denies allergies and previous surgeries, comorbidities: hiatal hernia, developed gestational diabetes mellitus, and vaginal candidiasis, without other intercurrences during prenatal care. Mother and father are diabetic and dyslipidemic, and the hypertensive father and have heart disease. He denies alcoholism and smoking, sedentary.

4.2 PHYSICAL EXAMINATION

On first admission: good general condition, lucid and oriented, conscious and verbalizing, walking, active, without any limitation due to physical and hearing impairment or visual. Skin ectoscopy

showed no apparent lesion. Aniteric, acyanotic, afebrile, eupneic in ambient air, with moist and stained mucous membranes, hydrated. BP 110/70 mmHg /HR 78 bpm /RF 20 irpm /T 36.1°C /BMI 25.21 kg/m². At vaginal touch: closed neck, posterior, presence of amniotic fluid in the vaginal cavity (bloody), BCF + (148) – BISHOP index = zero (unfavorable for induction).

4.3 DIAGNOSTIC HYPOTHESIS

Feto-pelvic disproportion + Gestational Diabetes Mellitus.

4.4 CONDUCT

The cesarean section at Misgav Ladach.

4.5 EVOLUTION

Uneventful procedure. Single live newborn, male, 3,630 kg, cephalic, Apgar 9/10, Capurro 39 s 3 d. At the postoperative examination, the puerperal woman was in good general condition, lucid and oriented, verbalizing, conscious, ectoscopy without alteration, absence of edemas, depressible abdomen, and no defense, clear urine, clean surgical wound, uterus with Pinard's safety globe formation, and physiological bloqueation. Hospital discharge after 48 hours, without intercurrences.

4.6 PROGNOSIS AND FOLLOW-UP

Puerperal appears at the emergency service complaining of constipation from the first postoperative day. She reports that she had previously used domperidone, but without improvement of symptoms. On examination: difficulty to walk due to severe abdominal pain and intestinal constipation from cesarean section, globose abdomen, distended, hyper tympanic, painful on palpation, diuresis present, and bowel movement absent. BP 110x80 mmHg/ HR 95 bpm/ SatO2 98%/ Weight 63kg.

Hospital admission was performed in the ward with the diagnosis of paralytic ileus after cesarean section, under the care of the Gynecology and Obstetrics service, and then symptomatic patients were prescribed for relief of pain and laxatives, but without elimination of fecal contents. Subsequently, a laxative diet, lactulose syrup, hydration with 0.9% saline solution, and intestinal lavage with glycerin drip were prepared, also without success.

The aforementioned conducts were maintained for two more days, without improvement of the clinical picture, puerperal woman reports difficulty to evacuate and eliminate flatus, globose abdomen, tympanic, distended, and dark vomit. Thus, radiography for acute abdomen men was requested with urgency and blood count, where it was evidenced the presence of a large amount of fluid in the intestinal loops and distension of the same (images 1 and 2), with this was contacted the assistant physician of the parturient to reevaluate her, as well as requested computed tomography of the total abdomen without contrast, which ruled out evidence of mechanical obstruction.

Image 1: Anteroposterior abdominal radiography

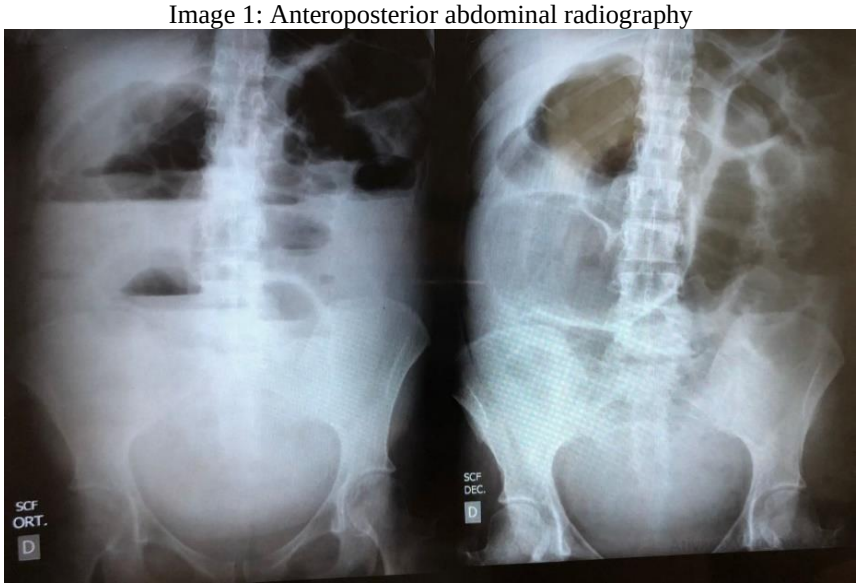
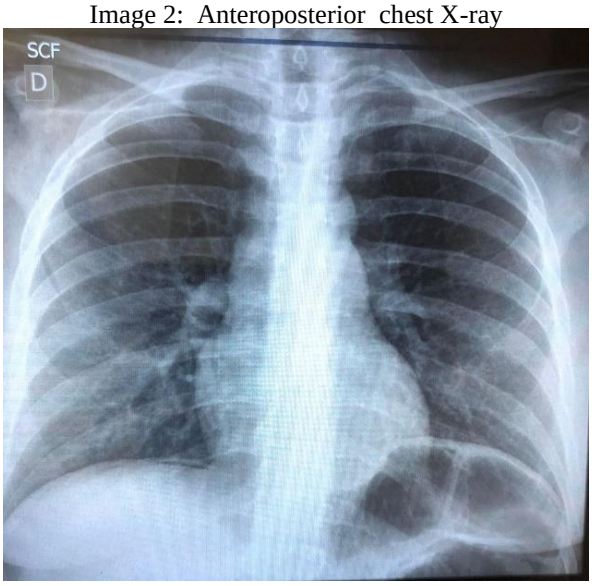


Image 2: Anteroposterior chest X-ray



After the evolution of the attending physician, he diagnosed her with Ogilvie Syndrome, suspecting then an acute pseudo-obstruction of the colon, requesting a colonoscopy of urgency for aspiration of intestinal gases for colonic decompression, to avoid a rupture and/or intestinal necrosis, was prepared with 20% mannitol 500 mL, which worsened abdominal discomfort.

After the evaluation of the medical clinic, the puerperal woman was feverish, dehydrated, and hypostatized with the maintenance of abdominal distention, then started Antibiotic therapy with Cephalothin 1g EV 6 /6 hours and Erythromycin 1g 6 /6 hours, zero diets, open nasogastric tube and hydration with 0.9% DES.

On the eighth postoperative day, the puerperal woman was admitted to the general ICU for better management and follow-up of the clinical case, as she continued to have severe abdominal distention, associated cramping, and compression pain, right-wing and abolished left-wing air-fluid noises, hypertympanism, nausea, and vomiting fecaloids (image 3), fever and restricted bowel movement.

Image 3: Content of fecaloid vomiting

* Photos made available and authorized by the research participant.

Image 4: Severe abdominal distension

Requiring evaluation of the general surgery, new radiography of the acute abdomen in orthostasis and electrolyte measurement was performed, evidencing the presence of multiple septate air levels, suggesting volvulus, in addition to hydro electrolytic disturbance (decrease in potassium and magnesium). After evaluation by the surgeon of the digestive tract, it was requested to transfer the puerperal woman to a neurological ICU and perform surgical decompression to avoid the rupture of intestinal loops.

Until then, use of erythromycin 1g, cephalothin 1g, Motilium 10mg, mestinon 60 mg, plasil 10mg/2mL, buscopam 20mg, dipyrone 500mg/mL, saline 0.9% 500mL 12/12 hours, omeprazole 40mg, pyridostigmine 0.5mg/ml, precedex 100 mcg/mL in BIC, tazocin 4.5g EV 6 /6 hours, potassium and vitamin K replacement.

4.7 SURGICAL MANAGEMENT

The Parturient was submitted to exploratory laparotomy with findings of intestinal obstruction, diffuse dilation of the entire small intestine and colon, without obstruction points, very distended cecum, with serous with imminent rupture, tactical appendectomy performed for intestinal and colonic emptying, cecum raffia and cavity drainage. Intraoperatively, the uterus was also opened, which showed clots and placental remains, and cleaning, softening and hypotonic uterus were performed.

A summary of urine, urine culture and culture of peritoneal secretion, and total parenteral diet were requested. Central venous access was also performed in the internal jugular and remains hemodynamically stable, and responsive, using oxygen therapy and without vasoactive drugs. Using clexane 40mg/0.4 mL (reduce risk of thrombosis), Regular insulin 100U/mL (risk of hypoglycemia), human albumin 20%, furosemide 20mg, tramadol 50mg/ml, and ondansetron 8mg/ml.

Laboratory tests before surgery: hemoglobin 7.6/ MCV 94.9%/ leukocytes 18,200/ platelets 413,000/ TGP 15 U/L/ amylase 25 U/L/ uric acid 4.8 mg/dl/ indirect bilirubin 0.16mg/dl/bilirubin direct 0.22mg/dL/ Total calcium 7.7 mg/dL/ Creatinine 0.53/ DHL 208 U/L/ Gamma-GT 23 U/L/ Arterial lactic acid 0.9 mmol/L/ Lipase 9 U/L/ PCR 327.3 mg/L/ Potassium 2.8 mmol/L/ Albumin 2.37g/dL/ Sodium 141 mmol/L/ TGO 10 U/L/ TP 15.8 seconds/ Albumin 2.37g/dL/ Sodium 141 mmol/L/ TGO 10 U/L/ TP 15.8 seconds / Albumen activity Prothrombin 52%/ INR 1.49/ APTT 31.7/ Urea 19mg/dL; Blood culture and Uroculture without alterations/ Urine bacterioscopy: absence of bacteria/ Bacterioscopy of peritoneal fluid: negative for peritonitis/ Urinalysis: 12 leukocytes/field;

Hemotherapy was performed with 2 units of concentrate of hemacidae (blood group AB).

The patient evolved without intercurrences, contacting, complaining of mild nausea, improvement of pain and abdominal distention, hemodynamically stable without vasoactive drugs, stable vital signs, diuresis regular, afebrile, laboratory improvement, leukocytosis and CRP, walking, evacuation in small quantities, accepting well to the oral diet, being discharged from the ICU to bed ward, remaining in use of clexane, metronidazole, prontosan and bromopride.

After 6 days of discharge from the ICU, puerperal sin pain complaints, reports bowel movements without abnormalities, walking without nausea, afebrile, diuresis present, normotensive abdomen and painful to deep palpation, clean surgical scar with Baker's drain on the right with serous contents, and then, by decision of the medical and multidisciplinary team, it receives hospital discharge after clinical improvement and normalization of laboratory tests.

5 DISCUSSION

Acute colonic pseudoobstruction, also called Ogilvie syndrome, is a clinical condition with signs, and characteristic symptoms of intestinal obstruction, and radiological findings of dilation of intestinal loops, being, in most cases, this dilation more exuberant in the large intestine, without there being an obstructive cause of a mechanical nature that explains the arrest of intestinal transit.[5] It is rare, and the gnostic day is done by exclusion through imaging tests or in the surgical procedure, which is of last choice, performed only in cases of failure to conservative treatment.

According to epidemiological data, the prevalence of this syndrome is more common in males and in the elderly,[2,5] not being frequent among postoperative complications in Gynecology and Obstetrics.

As differential diagnoses, we have neoplasms, adhesions, acute gastric dilation, fecal impaction, volvulus intestinal, mesenteric ischemia[4] and Chagas disease, which may present with symptoms similar.

The most common complications of the syndrome, if there is a delay in diagnosis, are rupture of the colon wall, with intestinal perforation, and consequently obitude for sepsis. abdominal (peritonitis) and death[6] and is due to progressive dilation of the loops with increased pressure, bacterial multiplication, and marked inflammatory response.

The pathophysiology is still unknown, but it was possible to observe during the literary analysis, that there is an imbalance between the sympathetic and parasympathetic autonomic nervous system, in which it occurs excessive suppression of the parasympathetic (interruption of sacral innervation[7]) and sympathetic stimulation results in atony of the colon,[2] which results in functional obstruction.

The syndrome in question may also be related to some known clinical conditions, such as acute myocardial infarction, trauma, neurological diseases, surgeries, and neoplasms; in addition to the pharmacological relationship to the use of opioids, calcium channel blockers, adrenergic agonists, and aestesicos[5].

As for the treatment, it varies according to the severity of the clinical picture and can be done in 3 ways: conservative, surgical, or colonic decompression (colonoscopy).[4] By if it is a functional obstruction, the initial approach is conservadora[8] and support, having as main objective analgesia, antiemetics, nutritional support, and management of the signs of intestinal dysmotility, with the use of a cholinergic agent, such as neostigmine, bromopride, domperidone, and metoclopramide. If there is no adequate clinical response to these initial measures, the alternative is to perform decompression by colonoscopy.[5] Still within the treatment conservative, it is mandatory to control hydro electrolytic disturbances, opens the nasogastric tube for gastric decompression, use laxatives, continuous rectal probing as a decompressive measure, and discontinuation of the use of medications that may aggravate the functional disorder of the gastrointestinal tract, such as anticholinergics, opioids, tricyclic antidepressants, clonidine, and calcium channel blockers .[5,6]

If this approach fails, endoscopic decompression probe placement is generally accepted as the first invasive therapeutic maneuver. The surgical approach by laparotomy or laparoscopic approach of urgency is indicated only in refractory or complicated cases with perforation and/or ischemia.[4]

To complementary exams, abdominal radiography is the most clinically relevant exam that has the best cost-benefit and diagnostic efficacy, since it is possible to visualize the restraint of intestinal loops in the absence of a mechanical/organic cause.[10,11] Colonoscopy, on the other hand, acts as a diagnostic and therapeutic examination, because in addition to Direct visualization allows decompression of the colon, reducing cases of intestinal rupture and mesenteric necrosis. And CT scans of the abdomen have greater predictive value to identify a possible injury, but it is not usually necessary to establish the initial steps of treatment. Its indication occurs in patients whose radiological examination contains nonspecific findings.[9-11]

6 CONCLUSION

Ogilvie Syndrome is a rare event within Obstetrics, which makes early diagnosis more difficult within the specialty. The case report highlights the importance of including the syndrome among the diagnostic suspicions in cases of postoperative evolution that is beyond the expected patterns. Although this condition is not part of the daily obstetric spectrum, its diagnosis should not be neglected, since it provides the opportunity to obtain early conduct and, consequently, a faster resolution to reduce complications and morbidity, and mortality.

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