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Ogilvie's syndrome (Acute colonic pseudo-obstruction) after caesarean section: case report

Loubna Slama, Hafsa Taheri, Hanane Saadi, Ahmed Mimouni

Department of Obstetrics and Gynecology, Mohammed VI University Hospital Center, Oujda, Morocco

Correspondence

Dr Loubna Slama, CHU Mohammed VI Oujda, email: loubnaslama6@gmail.com

Abstract

Introduction: Acute colonic pseudo-obstruction (Ogilvie's syndrome) is a rare but potentially life-threatening condition in the immediate postpartum period, particularly following a caesarean section. Early diagnosis and management are crucial to avoid serious complications.

Case Report: We present a case of a 21-year-old North African woman who developed Ogilvie's syndrome within 24 hours of an emergency caesarean section performed for preeclampsia with neurological complications. Prompt diagnosis via computed tomography and conservative management, including nasogastric decompression and neostigmine administration, led to a favorable outcome without surgical intervention.

Objective: This case report highlights the clinical presentation, management strategy, and a brief review of the literature to raise awareness of this rare condition in postpartum care.

Keywords: Caesarean section, Ogilvie's syndrome, early diagnosis, conservative treatment

Introduction

Acute colonic pseudo-obstruction, commonly referred to as Ogilvie's syndrome, is a functional disorder characterized by significant colonic dilatation without any underlying mechanical or anatomical obstruction. This rare yet serious condition can lead to severe complications such as caecal ischemia, perforation, sepsis, and even death if not promptly rec-

ognized and treated (1).

While the exact pathophysiology remains unclear, it is thought to involve parasympathetic dysfunction leading to impaired colonic motility (2). Notably, Ogilvie's syndrome can develop after caesarean sections, even in the absence of specific risk factors, posing a diagnostic challenge (3).

Given that mortality rates can reach up to 45%, early identification and multidisciplinary management are

essential (4). However, the general lack of awareness among clinicians often delays diagnosis, increasing the risk of severe outcomes (5). Here, we report a case of Ogilvie's syndrome following an emergency caesarean section, where early recognition and conservative treatment prevented surgical intervention.

Case Presentation

We report a case of a 21-year-old woman from North Africa, Gravida 3, Para 2, at 38 weeks of gestation, who presented to the obstetrics emergency department with preeclampsia complicated by neurological signs of hypertension, for which an emergency caesarean section was performed. The patient had no significant medical or surgical history and no known risk factors for Ogilvie's syndrome.

On the first postoperative day, the patient began to experience abdominal pain. Despite tolerating a normal meal and oral hydration, she had not passed flatus or opened her bowels. Physical examination revealed a soft, swollen abdomen, audible bowel sounds, but no signs of peritonism, although she experienced generalized lower abdominal pain. At 12 hours post-surgery, her abdominal discomfort significantly worsened, and she developed new tenderness on palpation, prompting further investigation.

A CT scan of the abdomen and pelvis revealed severe adynamic ileus with dilated small bowel (3.4 cm), caecum (9.7 cm), ascending colon (7.5 cm), and transverse colon (2.5 cm). There was no obvious transition point, but a gradual thinning was observed from the splenic flexure distally. No pneumoperitoneum or other intraabdominal abnormalities were detected. These radiological findings were consistent with Ogilvie's syndrome.

Conservative management was initiated, including the insertion of a nasogastric tube, fluid balance monitoring, and administration of prokinetics. The general surgery team was consulted, and the patient

showed a significant improvement. Her abdominal distension and pain gradually resolved. The decision was made to continue treatment with neostigmine, which led to favorable clinical evolution, with no need for surgical intervention.

Discussion

Ogilvie's syndrome, characterized by colonic dilation without a mechanical or anatomical obstruction, is a rare but serious condition that can develop following major surgeries, including caesarean sections (6). Its pathophysiology is thought to involve parasympathetic dysfunction, which results in impaired peristalsis and progressive colonic dilatation (7). The gravid uterus can exacerbate this by compressing the sacral parasympathetic plexus, which feeds the colon, contributing to the dysfunction (8, 9).

Although Ogilvie's syndrome is most commonly associated with advanced age, major surgeries, or patients with significant comorbidities, it can also occur postpartum following caesarean sections. It is reported that caesarean sections account for approximately 10% of cases of Ogilvie's syndrome (10), with an increased incidence in emergency caesareans compared to elective ones (11). The rising rates of caesarean deliveries globally may therefore lead to a higher prevalence of this condition in the future.

Early recognition of Ogilvie's syndrome is crucial for effective management. If untreated or diagnosed late, the condition can lead to life-threatening complications such as intestinal ischemia, bowel perforation, and sepsis (1, 12). The clinical presentation of Ogilvie's syndrome in the postpartum period is often non-specific, which complicates early diagnosis. However, the condition should be considered in all postpartum patients presenting with acute abdominal pain and distension, particularly following an emergency caesarean section (13).

The management of Ogilvie's syndrome depends

on the severity of the condition and the presence of any complications such as caecal ischemia. Conservative treatment, including nasogastric decompression, intravenous fluids, and prokinetic agents such as neostigmine, is typically effective in the absence of bowel ischemia or perforation. In cases where conservative measures fail, endoscopic decompression or surgical intervention may be required. (14, 15)

In our case, early recognition of Ogilvie's syndrome allowed for prompt conservative management, which resulted in a favorable outcome. The patient did not require surgical intervention, highlighting the importance of early diagnosis and appropriate non-invasive treatment.

Conclusion

Though it is a rare condition its importance lies in its ability to cause dangerous complications in affected patients with high mortality rate. Indeed, significant morbidity and mortality from Ogilvie's syndrome has been reported when there is a wrong diagnosis, ileus, or a delay in the diagnosis with possibility of bowel perforation.

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Patients consent

Patients consent was required and no personal in-

formation or detail was included

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