



Acute Intestinal Obstruction in the Post Partum Perioda Case Report

Bahi Mohamed^{1*} and El Guezzar Ahmed²

¹*Department of Intensive Care Unit, Avicenne Military Hospital, Marrakesh, Morocco.*

²*Department of Surgery, Avicenne Military Hospital, Marrakesh, Morocco.*

Authors' contributions

This work was carried out in collaboration between both authors. Author BM designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors BM and EGA managed the analyses of the study. Author BM managed the literature searches. Both authors read and approved the final manuscript.

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Case Study

ABSTRACT

Introduction: Bowel obstruction rarely complicates pregnancy; however, it is a life-threatening complication for both mother and child. This is a diagnostic and therapeutic emergency that must be and discussed in front of any digestive symptomatology. We report a case of hial volvulus complicating childbirth.

Observation: A 26-year-old primigravida, who gave birth vaginally, presented an abdominal pain on Day 8 of the postpartum period. The onset of symptoms went back to Day 6 by the installation of an incomplete shutdown table for materials and gases. An exploratory laparotomy revealed a volvulus over the common small bowel mesentery with extensive intestinal necrosis. Surgical treatment consisted of devolvulation with resection of the necrotic hial segment, terminolateral anastomosis and large peritoneal toilet.

Discussion: Diagnosing the cause of an occlusion is difficult in the immediate postpartum period. The enlargement of the abdomen and the difficulty in obtaining abdominal signs (due to the loss of tone of the abdominal wall) may mask clinical signs.

Conclusion: Bowel obstruction rarely occurs in the postpartum period but it'saccompanied by high

*Corresponding author: E-mail: bahi.mohamed11@gmail.com;

maternal morbidity and mortality often due to delayed diagnosis and treatment. Through the study of this clinical case, we propose to review the data in the literature and initiate the general principles of management and treatment.

Keywords: Intestinal obstruction; abdominal; vaginal delivery; Haematological.

1. INTRODUCTION

Bowel obstruction during and after a pregnancy is a rare and serious complication of normal vaginal delivery. It can be fatal if not recognized early. This is an emergency diagnosis that needs to be discussed before any digestive symptomatology since the positive diagnosis is often difficult to establish.

We report the clinical case of a hail volvulus complicating the following layers

2. CASE REPORT

A 26-year-old patient Gravida 1 Para 1 with no pathological antecedents, who was delivered vaginally, presented with an abdominal pain on Day 8 of the post partum period. The beginning of the symptomatology went back to Day 6 of the post partum period by the installation of early vomiting with complete absence of feces and flatus in the last one 48 hours ago and not feverish with a temperature of 37.2

The clinical examination found a conscious patient, oriented, GCS 15/15, afebrile at 37.2. She was tachypneic with a respiratory rate at 28 cpm, tachycardia with a heart rate at 130 Bpm

and normotensive with a blood pressure of 117/78 mmhg.

Abdominal examination revealed an abdominal sensitivity without defense or contracture and a sensitivity to palpation of the pouch of Douglas.

The gynecological examination was otherwise normal.

Haematological tests showed a predominantly neutrophil hyperleukocytosis at $39000 / \text{mm}^3$, thrombocytosis with a platelet count at $510,000 / \text{mm}^3$ and a C reactive protein at 8mg/l.

Abdominal ultrasound showed the presence of a non echogenic peritoneal effusion, of great abundance in the perihepatic region.

The cytobacteriological study of the aspirated effusion reveal an exudative fluid with a serosanguinous appearance and a rate of erythrocytes at $590 / \text{mm}^3$ and leukocytes at $18000 / \text{mm}^3$ predominantly Neutrophils (85%).

In front of this clinical biological table, an exploratory laparotomy has been indicated and objectified a hail volvulus on mesentery with 40 cm necrosis extending from terminal hail to the ileocaecal junction (Figs. 1, 2).



Fig. 1. Hail volvulus on mesentery

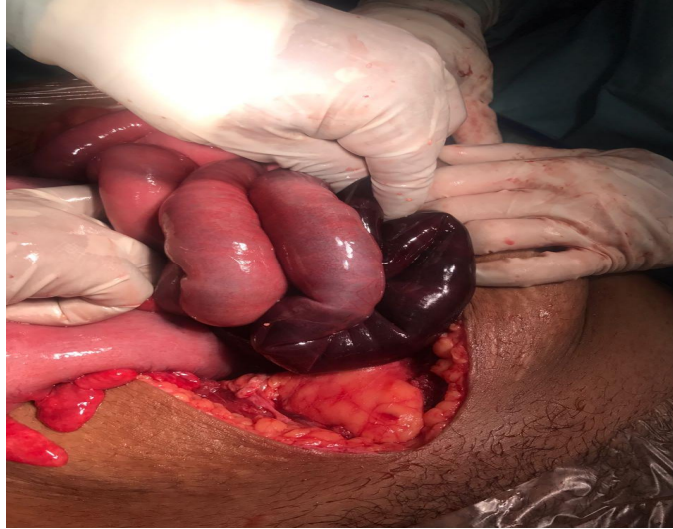


Fig. 2. (Up) gangrenous loop of volvulus segment intestine(Down) post gravida uterus

The surgical procedure consisted of a hial devolvulaton with expanded ileocaecal resection on necrotic hial and a terminolateral ileocolic anastomosis.

Postoperative consequences were simple.

3. DISCUSSION

The incidence of intestinal obstruction during pregnancy, in the most studies, is 1/1500 to 1/3000 pregnancies [1].

About 53 to 59% of intestinal obstructions are due to adhesions or flanges secondary to previous surgery or episodes of Inflammatory pelvic diseases [2]. The other etiologies are in order of frequency: intestinal volvulus (25%), acute intestinal intussusception (5%), strangulated hernia (1.4%), acute appendicitis (0.5%) [3].

The differential diagnoses are multiple and polymorphic.

Certainly, colonic pseudo-obstruction (Ogilvie's syndrome) is a recognised entity in pregnancy and the post-partum period [4].

Intestinal or colonic obstruction due to a gravid uterus in the third trimester, although rare, has also been documented [5].

There are also reports of uterine masses and foreign bodies, such as actinomycoses and

leiomyomas, causing large bowel obstruction [6, 7].

The clinical diagnosis of occlusion is based on the four cardinal signs: abdominal pain, vomiting, abdominal distension and stopping materials and gases.

However, It is common to observe one or more of these symptoms during pregnancy.

All this reflects the difficulty of the clinical diagnosis (4 cases of incorrect diagnosis on 9 patients in the MEYRESON et al. series) [8] and a constant delay in the management.

In the beginner forms, the radiography is little contributive, it is advisable to realise an abdominal X Ray 12 to 24h late [1].

The CT Scannshould bereplaced whenever possible by a non-ionizing technique

In the presence of a suggestive table of intestinal obstruction, the surgery must to be the rule.It must be preceded as for any intestinal obstruction, by a preoperative resuscitation essential for the hydro-electrolytic reequilibration.

4. CONCLUSION

Bowel obstruction rarely occurs in the post partum period but it's accompanied by high maternal morbidity and mortality, often due to delay in diagnosis and therapy. Its management must be multidisciplinary by a radiologist, obstetrician, intensivist and surgeon.

CONSENT

As per international standard or university standard, patient's consent has been collected and preserved by the authors.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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