

Lithopedion Complicated by Acute Intestinal Obstruction: A Case Report at Bogodogo University Hospital, Ouagadougou

Yobi Alexis Sawadogo^{1,2*}, Emmanuel Ouédraogo², Sibraogo Kiemtoré^{2,3}, Adama Ouattara^{1,2}, Issa Ouédraogo⁴, Charlemagne Ouedraogo^{1,2}

¹Department of Obstetrics and Gynaecology, Bogodogo University Hospital, Ouagadougou, Burkina Faso

²Health Science Training and Research Unit, Joseph Ki-Zerbo University, Ouagadougou, Burkina Faso

³Department of Obstetrics and Gynaecology, Yalgado Ouédraogo University Hospital, Ouagadougou, Burkina Faso

⁴Obstetrics and Gynaecology Department, Ouahigouya Regional University Hospital, Ouahigouya, Burkina Faso

Email: *sawalexis@yahoo.fr

How to cite this paper: Sawadogo, Y.A., Ouédraogo, E., Kiemtoré, S., Ouattara, A., Ouédraogo, I. and Ouedraogo, C. (2025) Lithopedion Complicated by Acute Intestinal Obstruction: A Case Report at Bogodogo University Hospital, Ouagadougou. *Advances in Reproductive Sciences*, 13, 1-5.

<https://doi.org/10.4236/arsci.2025.131001>

Received: November 6, 2024

Accepted: December 27, 2024

Published: December 30, 2024

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Abstract

Lithopedion is a rare clinical situation characterised by the calcification of a foetus that has died during an ectopic pregnancy, usually in the abdominal cavity. It occurs in 1.5 to 2% of ectopic pregnancies. It can be asymptomatic for several years. However, various complications can occur that lead to diagnosis. The authors report a case of lithopedion complicated by acute intestinal obstruction in a 24-year-old woman in her first pregnancy. This complication occurred after 12 months of amenorrhoea. A mass containing a calcified foetus was removed by laparotomy.

Keywords

Lithopedion, Intestinal Obstruction, Bogodogo, Ouagadougou

1. Introduction

Lithopedion, also known as ‘stone baby’, is a rare clinical situation characterized by the calcification of a fetus that has died during an ectopic pregnancy, usually in the abdominal cavity. It complicates 1.5 to 2% of abdominal pregnancies and accounts for 0.0054% of all pregnancies [1]-[3]. Lithopedion can develop asymptotically over several years. It is a rare form that is difficult to diagnose and often requires radiological examination. However, various complications may

occur leading to its detection [3] [4]. Treatment remains undefined. It is essentially surgical, although some authors recommend a watchful waiting approach in the absence of symptoms. However, various complications can occur leading to its detection [3] [4]. The authors report a case of unrecognized lithopedion complicated by an acute intestinal obstruction in a young woman. This case highlights the existence of this rare clinical situation, its complications, and the importance of a thorough history to arrive at a diagnosis.

2. Observation

Mrs C.K., a 24-year-old farmer living in a rural area, was referred to us by a 1st level health facility for abdominal pain with amenorrhea for twelve (12) months.

Questioning revealed severe abdominal pain associated with vomiting. She reported cessation of stool and gas and an increase in abdominal volume that had been developing for two (02) days. In addition, the patient reported intermittent pelvic pain for ten (10) months, which led her to self-medicate with herbal remedies.

Her last period was approximately twelve (12) months ago. This was the patient's first pregnancy and she had no significant medical or surgical history. Mrs C.K. had an abdominal ultrasound performed the day before her admission, which showed a calcified heterogeneous pelvic mass over the uterus, measuring 110 mm by 100 mm.

On admission, she was in poor general condition with no signs of anaemia. Physiological parameters included body temperature of 36°C, tachycardia of 112 beats per minute and polypnoea of 26 cycles per minute.

Physical examination revealed a distended abdomen which was tender to palpation. Palpation also revealed a hypogastric mass, which was difficult to assess due to the painful distention. Percussion revealed a diffuse tympany. Given the signs of intestinal obstruction with an altered general condition associated with the pelvic mass found on ultrasound, no further radiological investigations such as pelvic CT or pelvic MRI were performed. Emergency exploratory laparotomy under general anaesthesia was proposed and performed.

On opening the abdominal cavity, we found a pelvic mass adhering to the anterior parietal peritoneum, the uterus, the omentum and the distended bowel loops upstream. We performed progressive adhesiolysis with partial omentectomy to free the mass. Exploration after adhesiolysis revealed an intestinal opening which we repaired with a 3/0 absorbable suture.

Dissection of the mass revealed a mummified fetus with a hyperflexed leg.

The postoperative course was uncomplicated, and the patient was discharged on postoperative day 7 in good clinical condition. She received psychological support from the surgeon in the postoperative period, but this was not sufficient. She did not receive a consultation with a psychologist before her discharge, due to the lack of an available specialist (**Figure 1, Figure 2**).

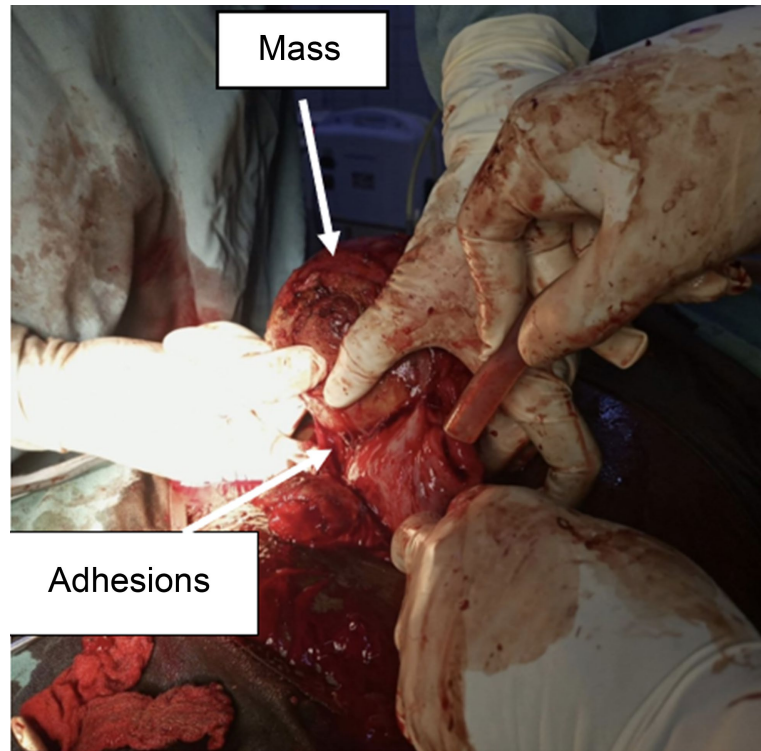


Figure 1. Mass extraction.



Figure 2. Operative part. (a) encapsulated foetus; (b) calcified foetus after dissection of the surgical specimen.

3. Discussion

Lithopedion is the result of an undiagnosed and untreated abdominal pregnancy [5]. It is characterised by the calcification of a foetus that has died as a result of an

ectopic pregnancy, usually in the abdominal cavity. This condition is the result of a number of factors, the most important of which are: ectopic implantation of the pregnancy, failure to diagnose the pregnancy, which progresses until the fetus is approximately three to six months old, fetal death and subsequent calcification. Other authors add the failure of the egg to migrate and the absence of specific symptoms of ectopic pregnancy [5]. Low socio-economic and intellectual status often leads to a delay in the first antenatal consultation, or even to no follow-up at all. As a result, ectopic pregnancies remain undiagnosed and progress to lithopedion. Lithopedion complicates 1.5 to 2% of abdominal pregnancies, with fewer than 300 cases described in the literature over the last 400 years [1] [2]. In rare cases, the diagnosis is made during surgery or even at autopsy [2] [6]. Diagnosis is often made by abdominal CT or pelvic MRI. In our case, given the urgency of the clinical condition, we did not have time to perform these tests. These investigations would have allowed us to better characterise the mass to guide management.

In the various observations published in the literature, the age of the patients ranged from 23 to 100 years [5]. Our patient was 24 years old. The diagnosis was made relatively early (less than one year) due to the onset of complications. In other cases, the diagnosis was made years later, sometimes after the menopause [6] [7]. In these cases, the development is asymptomatic for a long time [8] [9] and is discovered by chance during an X-ray examination [2]. Pelvic pain, a pelvic mass or compressive signs may be reported [5]. In our case, the patient reported intermittent pain for 10 months. However, complications, especially infectious or obstructive, may occur and lead to the diagnosis [3] [9]. This was the case in our patient who presented with intestinal obstruction, as reported by Riogi *et al.* in Kenya [3] and Mishra [10].

In contrast to several authors [3] [5] [6], our patient was in her first pregnancy. This bad experience may have negative psychosocial and obstetric consequences for this young woman.

Treatment is given on a case-by-case basis, depending on the patient's symptoms and complications. Surgical removal is the rule, most commonly by laparotomy [1]-[3] [8]. The psychological impact must also be considered, as the experience can be traumatic. A multidisciplinary approach involving obstetricians, surgeons and mental health professionals is therefore recommended for optimal management.

4. Conclusion

Lithopedion is a rare clinical condition. It may develop asymptotically over several years. It can occur at any age. However, it is the occurrence of complications that most often leads to diagnosis. Treatment is mainly surgical, but the psychological aspect should not be overlooked and requires a multidisciplinary team.

Conflicts of Interest

The authors declare no conflict of interest.

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