



■ Case Report

Retained post-abortal endo-uterine bone debris: A case report from the Souro Sanou University Hospital in Burkina Faso

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Abstract:

Long-term retention of endo-uterine debris after abortion is a rare occurrence. Uterine vacuity is a prerequisite for cessation of bleeding and avoidance of post-abortion endometritis. We report a case of retention of endo-uterine bone debris in the 5th month post abortion of a twin pregnancy to raise the issue of diagnosis and management in a setting where hysteroscopy is not available.

Keywords: abortion, retention, endo-uterine bone debris, hysterectomy, Burkina Faso

Source(s) of support: not applicable

Conflicting Interest: authors declared have no conflicting interest

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Acknowledgement:

We acknowledge colleagues who helped in management of this case, Dr Zenabou Boussini, Dr Eric Alihonou Togbe and Professor Moussa Bambara fro his advice and support

Introduction

The expulsion of the product of conception before attainment of age of viability is a common occurrence during pregnancy¹. This expulsion can be spontaneous or induced, either which may be complete or incomplete. In fact, the frequency of spontaneous abortions in 2012 was 72.2% while that of unsafe abortions was 17.3%². Complications related to abortions often reported are haemorrhages, placental retention, traumatic injuries and secondary infections³. Post-abortion care ensures uterine evacuation either through manual vacuum aspiration (MVA) or medical abortion. Long-term persistence of endo-uterine debris is often an uncommon occurrence.

We report a case of retained endo-uterine bone debris five months post-abortum of a five-month twin pregnancy to raise the issue of diagnosis and management in a context where hysteroscopy absent.

Case

Mrs. O.D., was a married, 38-year-old, Para 2+1, who lost both children in infancy, and the abortion was a twin pregnancy at 20 weeks. She came from the Republic of Côte d'Ivoire and was admitted to the Regional Hospital Centre in Banfora, Burkina Faso, for the persistence of moderate pelvic pain accompanied by hydrorrhea and intermittent endo-vaginal bone debris following an abortion of a 5-month twin pregnancy. She had not reported any other specific pathological history.

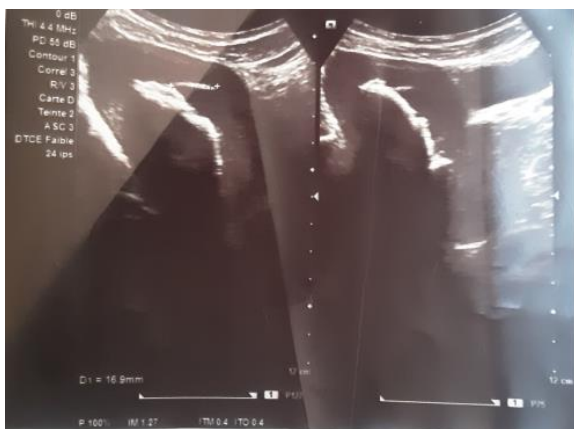


Figure 1: Pelvic ultrasound image taken at the BANFORA CHR.

The history revealed that she had a spontaneous abortion on the 22 /01/2019 of a twin pregnancy

estimated at 20 weeks. The first foetuses were expelled at home. She went to the health centre at her place of residence in Côte d'Ivoire where the remaining products of conception were evacuated using MVA. The post-abortion period was consisted of persistence of hydrorrhea, moderate pelvic pain, and intermittent spontaneous expulsion of bone debris through the vagina.



Figure 2: Pelvic ultrasound images taken at the BANFORA CHR.

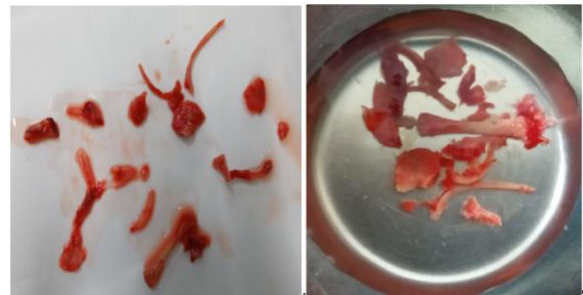


Figure 3: Images of endo-uterine bone debris (extracted after rinsing)

Amidst this persistent hydrorrhea, the return of menstruation occurred as early as the 3rd month post-abortum. Thus, she returned to Burkina Faso to seek better care. At the Regional Hospital Centre of Banfora, a pelvic ultrasound scan showed endometrial calcifications of 40mm and 20mm wide with a 17mm fragment stuck in the anterior myometrium (figures 1 and 2) with suspicion of osteoid metaplasia of the endometrium in view of the context.



Figure 4: Post-treatment pelvic ultrasound image taken at the CHUSS.

An hysteroscopy was suggested, which motivated her referral to the Souro SANOU University Hospital Centre (CHU SS) for appropriate treatment.



Figure 5: Images of bone debris extracted after hysterectomy.

At the CHUSS, General clinical examination showed nothing of clinical importance. On speculum examination, the cervix and vaginal walls were normal in appearance, while bimanual vaginal examination revealed a slightly enlarged uterus of about 8 weeks gestation. The cervix was firm, posterior, and closed, with no motion tenderness. The pouch of Douglas was normal.

A repeat pelvic ultrasound examination revealed numerous endo-uterine hyperechoic images.

Given this context, the diagnosis of post-abortion retention of endo-uterine bone debris was made. In view of the unavailability of hysteroscopy, an extraction using a curette and a crocodile forceps under ultrasound guidance was done. She had dilatation of the cervix with Hager's under spinal anaesthesia prior to commencement of the evacuation.

Seventeen endo-uterine bone fragments were extracted, with the largest measuring 4 cm (Fig. 3).

Immediate post-evacuation ultrasound noted the persistence of some endo-uterine bone fragments, which were rescheduled for another session for the evacuation. (Figure 4). While waiting, the patient reported spontaneous intermittent spontaneous expulsion of some bone fragments.

A second post-treatment check-up 4 months later noted the persistence of endocavitary bone debris, necessitating a second attempt at transcervical debris extraction under ultrasound guidance. However, this last attempt was unsuccessful which warranted a laparotomy, and hysterotomy for complete extraction of the debris. Numerous bone fragments were evacuated

from the uterine fundus as well as a bone fragment embedded in the anterior wall of the myometrium as shown in Figure 5.

Discussion

Our case has a clinical, therapeutic and psychosocial peculiarity. From a clinical perspective, the number of bone debris extracted was 20 with a fragment embedded in the myometrium. Its diagnosis was facilitated by ultrasound examination.

The complete extraction of bone debris was incomplete in the first attempt, and impossible in a second stage procedure despite ultrasound guidance. Indeed, the intra-myometrium fragments could not be extracted with the crocodile forceps despite ultrasound guidance. This justifies the need for an operative hysteroscopy, which would have allowed diagnosis and management at the same time. Psychosocially, the patient had undergone a prolonged attempt at treatment with its financial and psychological repercussions. This patient could have benefited from better care if operative hysteroscopy was available, more so that skilled personnel were available.

Incomplete expulsion of the product of conception is a common situation during an abortion⁴. An empty uterus is a prerequisite for a favourable involution of the uterus during the post-abortion period. The long persistence of endo-uterine debris, especially bone debris, is an exceptional situation. The codification of post-abortion care today should ensure the uterus is empty⁵. The literature reports isolated cases of endo-uterine bone debris discovered during evaluation for secondary infertility^{6,7}, usually associated with clandestine abortions^{8,9}.

The duration of bone retention reported in literature ranged from a few weeks to eight years. In this patient, it was five months. Diagnostic hysteroscopy followed by surgery remains the gold standard in such situations, and allows the restoration of fertility^{1,10}. We did not find in our literature search of any cases of bone debris retention reported in the Burkina Faso.

In countries with limited resources like ours, technical equipment is inadequate, and hospitals often lack hysteroscope. This was the case at the Souro Sanou University Hospital in Bobo Dioulasso, which limits diagnostic and therapeutic possibilities. The observation of this case could be attributed to the abortion of an

advanced pregnancy, without qualified personnel and an ultrasound to ensure that the uterus was empty at the first consultation.

Feedback from patient

At the happy outcome of this case, the patient expressed her feelings of satisfaction and joy:

« ...It has been a long and difficult road to finally end this disease. I do not even know if you should call it a disease. I have been very stressed and desperate. However, since I was sent here, I have got my hope back and finally everything went

well. I think that we must give the right equipment to the hospitals to continue to help women in such situations. Doctor, I do not know how to thank you for removing all these bones from my belly. May God bless and protect you throughout your career. Thank you so much».

Conclusion

Chronic retention of post-abortal endo-uterine debris is an unusual situation. Hysteroscopy remains both the diagnostic and interventional choice for management.

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