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Case Report

Retained fetal bones: an unusual cause of abnormal uterine bleeding

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ABSTRACT

Abnormal uterine bleeding (AUB) is a common gynaecological problem with most common causes being fibroid, polyp, endometritis, neoplasia and coagulation disorder. Presence of retained intrauterine fetal bones as a cause of AUB, is a rare but well recognized entity. Patient may present with subfertility, secondary infertility, chronic pelvic pain, vaginal discharge, pelvic inflammatory disease, abnormal uterine bleeding. Incidence reported in literature is 0.15% among patients undergoing diagnostic hysteroscopy. Calcification appears as hyperechoic area on ultrasound. Hysteroscopy guided removal of bony fragments is the gold standard and leads to complete resolution of symptoms.

Keywords: Abnormal uterine bleeding, Bony fragment, Infertility

INTRODUCTION

Abnormal uterine bleeding (AUB) is a common problem accounting for one third of outpatient visit to gynaecologists.¹ AUB can be caused by a variety of causes, most common being fibroid, polyp, endometritis, neoplasia and coagulation disorder. But retained intrauterine bones is a rare cause. Bony fragments may be retained in uterine cavity as a consequence of surgical pregnancy termination or missed abortion. In literature, fetal bone fragments have been identified from 8 weeks to 15 years after abortion.² Patient may present with subfertility, secondary infertility, chronic pelvic pain, vaginal discharge, pelvic inflammatory disease, abnormal uterine bleeding or may be completely asymptomatic.³

CASE REPORT

A 38 year old lady P₁L₁A₁ presented to the out patient department of our tertiary care hospital with history of irregular and heavy menstrual bleeding since last one year. Her previous menstrual cycles were regular with normal flow. There was no history of any medical, endocrinological or coagulation disorder. She gave history of a missed abortion at 14 weeks period of gestation, for which dilation and curettage was done at a

private hospital one year back. According to her, menstrual problems started after the abortion. General physical and pelvic examinations were unremarkable.

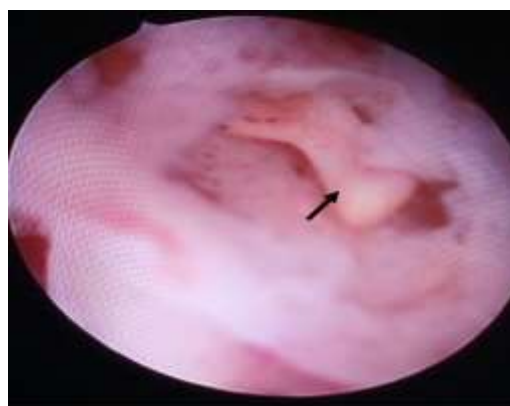


Figure 1: Flimsy adhesions and bony spicules embedded in posterolateral uterine wall.

Transvaginal ultrasound revealed bright hyperechoic intrauterine shadows suggestive of calcification. Diagnostic hysteroscopy revealed flimsy adhesions and bony spicules embedded in posterolateral uterine wall (Figure 1). Cervix was dilated and bony spicules removed

by curettage. Histopathological examination confirmed diagnosis of bone.

DISCUSSION

Presence of retained intrauterine fetal bones is a rare but well recognized entity. It is most commonly reported following second trimester surgical abortion. History of previous pregnancy or abortion has been reported in more than 80% of cases.⁴ Incidence reported in literature is 0.15% among patients undergoing diagnostic hysteroscopy.⁵ It usually presents as secondary infertility, menometrorrhagia, dysmenorrhea, vaginal discharge, pelvic pain, and spontaneous expulsion of bony fragments.^{3,6} Mostly it has been diagnosed during workup of secondary infertility and accounts for 11.9% of foreign bodies removed from uterine cavity.⁷ Secondary infertility may be caused by various mechanisms like formation of uterine synechiae or causing inflammation (IUCD like effects). But retention of fetal bone as a cause of abnormal uterine bleeding is rare. Mechanism of abnormal uterine bleeding (AUB) could be due to chronic endometritis or altered prostaglandin levels. It has been observed that levels of $PG_{2\alpha}$ decreases by 15% after removal of bony fragments.⁶ In our case menometrorrhagia that occurred after surgical abortion would have been caused by retained bony pieces through similar mechanism. Srofenyoh et al reported 3 cases of retained fetal bones which presented as secondary infertility.³ Makris et al reported a case series of 3 patients with retained fetal bone presenting as AUB.⁵ All of these were managed effectively by hysteroscopic removal.

Apart from proper history and examination, imaging study especially transvaginal ultrasound is invaluable in making a diagnosis. Calcification appear as hyperechoic area on ultrasound but the gynaecologist should also be aware of other differential diagnosis of endometrial ossification which includes mixed mullerian mesenchymal tumor (MMMT), IUCD, Osseous metaplasia or endometrial tuberculosis. Hysteroscopy is gold standard as it is both diagnostic and therapeutic. Complete removal of bony fragments results in complete resolution of symptoms.

CONCLUSION

Currently when the prostaglandins are available, women are less frequently subjected to complications of surgical abortion. Whenever surgical abortion is performed, a post abortal ultrasound should be done to confirm the completion of procedure. Possibility of retained bony spicules should be kept in mind, if a woman present with ultrasound picture of hyperechoic structure in uterus with previous history of abortion. Hysteroscopy guided removal of bony fragments is the gold standard and leads to complete resolution of symptoms.

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