



Retained Intrauterine Fetal Bone Chips-A Case Report

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Abstract

Introduction: *Abnormal uterine bleeding is a common gynaecological problem with most common causes being fibroid, polyp, endometritis, neoplasia and coagulation disorder. Retained intrauterine fetal bone chips is a well recognised complication following either spontaneous or induced abortion but it is a rare cause of AUB. If not recognised in time it can lead to a long term sequelae of chronic pelvic pain and secondary infertility. Incidence reported in literature is 0.15% among the patients undergoing hysteroscopy. We report a case when this complication was recognised early and treated with no future consequence. Removal of retained intrauterine fetal bone chips can be done by dilatation and curettage or hysteroscopically but latter is more safe and leads to complete resolution of symptoms.*

Case Report: *A 32 year old women, para one, presented with complaints of irregular bleeding per vaginum, occasional passage of bony fragments with white discharge per vaginum, and pelvic pain following surgical termination of 16weeks gestation. Transvaginal ultrasound scan confirmed a bright hyperechogenic shadow in region of endometrial cavity suggestive of a fetal bone. Patient was put up for operative hysteroscopy at our centre and retained intrauterine fetalbone chips were removed under general anaesthesia.*

Conclusion: *Removal of retained intrauterine fetal bone chips by operative hysteroscopy under direct vision facilitates complete removal and is more safe than dilatation and curettage. It is invaluable in achieving a cure for these patients without resorting to more aggressive surgery. Blind dilatation and curettage is diagnostically inaccurate and often ineffective as it may miss the focal endometrial lesions. After removal of bony fragments, restoration of fertility and improvements of symptoms is expected. Ultrasound and hysteroscopy are both complementary and when used in conjunction can increase the number of cases diagnosed.*

Keywords: *Abnormal uterine bleeding, retained intrauterine fetal bone chips, transvaginal ultrasound, hysteroscopy.*

Introduction

Presence of retained intrauterine fetal bones as a cause of abnormal uterine bleeding is a rare but well recognised entity. Bony fragments may be retained in the uterine cavity as a consequence of surgical termination of pregnancy or missed abortion. Retained intrauterine foreign body can be placental bits, retained thread of copper T,

retained fetal bone chips, starter of tube light¹, unabsorbed suture strings² etc. Women with intrauterine foreign body usually present with complaints of excessive vaginal discharge menorrhagia, dysmenorrhoea, dyspareunia, chronic pelvic pain^{3,4} and infertility of varying duration.⁵ Dilatation and curettage was the method used in olden days for removal of foreign bodies.

Now-a-days, hysteroscopy is being used for the diagnosis as well as treatment of such conditions.⁶

Case Report

A 32 year old women came to the gynaecological outpatient department of our tertiary care hospital with history of irregular bleeding per vaginum, occasional passage of bony fragments with white discharge and pelvic pain since last 4 months after surgical termination for 16 weeks gestation at a private hospital. She had one living issue, delivered 2 years back by caesarean section. Rest of the history was unremarkable. Her general and physical examination was within normal limits. Transvaginal sonography revealed bright hyperechogenic shadow in the region of endometrial cavity suggestive of calcification. Patient was put up for operative hysteroscopy under general anaesthesia. Multiple small bone chips embedded in posterolateral uterine wall were removed hysteroscopically.

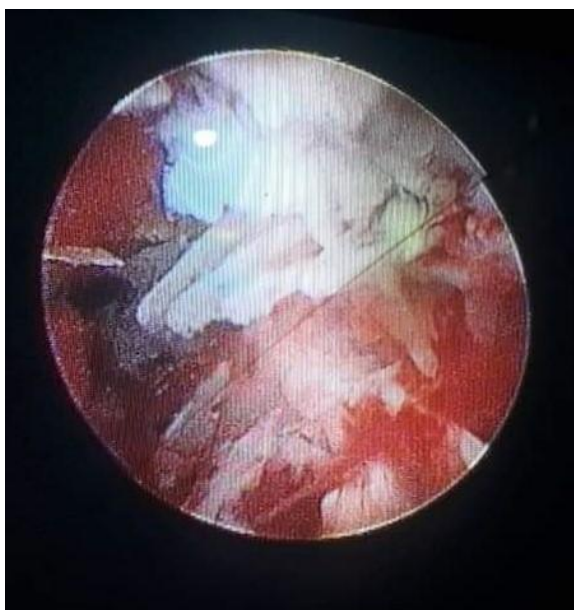


Figure 1. Shows the hysteroscopic view of the bones in the uterine cavity. The bone fragments were grasped by hysteroscopic grasper and taken out with whole scope. 18 chips of bone were taken out. post procedure uterine cavity was normal



Fig. 2 shows the retrieved bone chips .The material was sent for histopathology to confirm the diagnosis. Patient was discharged on same day. The histopathology report confirmed the boney trabeculae.

Discussion

Intrauterine fetal bone retention is a rare complication and often occurs after abortion in second and third trimesters.⁷ The bony fragments probably work like an intrauterine contraceptive device to stimulate the secretion of endometrial prostaglandins, resulting in secondary infertility.⁸ An incidence of 0.15% was reported after 2000 diagnostic hysteroscopies for abnormal uterine bleeding.⁹ There are isolated case reports of retained bone chips leading to infertility in literature. Moon et al reported 11 such cases of secondary infertility with retained intrauterine fetal bones suspected on ultrasound. Removal of bone chips was done by dilatation and curettage with or without hysteroscopy post procedure in their patients. But, Retention of fetal bones as a cause of abnormal uterine bleeding is rare. Mechanism of abnormal uterine bleeding could be due to chronic endometritis or altered prostaglandin levels. In our case metrorrhagia that occurred after surgical abortion may be due to the similar mechanism. Makris et al reported a case series of 3 patients with retained fetal bone

presenting as AUB.⁹ All of these cases were managed effectively by hysteroscopic removal. Apart from proper history and examination, transvaginal ultrasound is invaluable in making a diagnosis. Calcification appears as a hyperechoic area on ultrasound but we should be aware of the differential diagnosis of endometrial ossification which includes mixed mullerian mesenchymal tumor, IUCD, osseous metaplasia or endometrial tuberculosis. This case demonstrated the importance of follow up in cases of mid trimester abortions especially after surgical termination of pregnancy, as they are more prone to be complicated by retained products of conception. Removal of intrauterine fetal bone chips can be done by blind dilatation and evacuation¹⁰. Hysteroscopy is the gold standard as it is both diagnostic and therapeutic. Complete removal of bony fragments results in complete resolution of symptoms.

Conclusion

Whenever surgical abortion is performed, completeness of the procedure should be confirmed by postabortal ultrasound. If a woman presents with ultrasound picture of hyperechoic structure in the uterus with previous history of abortion, possibility of retained bony spicules should be kept in mind. Hysteroscopy guided removal of bony fragments leads to complete resolution of the symptoms.

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References

1. Gupta N, Singh N, Mishra R, Mittal S. An unusual foreign body incarcerated in the uterus: a case report. *J Turkish German Gynecol Assoc* 2007;8(2):208-10
2. Kazakov BJ, Khankoev IM, Pererva VV. Results of hysteroscopic method of foreign body removal out of the uterus cavity *J Am Assoc Gynecol Laparosc.* 1994;1(4) s 16
3. Verma U, Chong D, Perez I, Medina C. Fetal bones retained in the uterine cavity as a rare cause of chronic pelvic pain: a case report. *J Reprod Med* .2004;49 (10):853-5
4. Kalu E, Richardson, R. Retained fetal bones: an intrauterine cause of chronic pelvic pain. *Arch Gynecol Obstet* 2009; 279(2):233-4
5. XIA E, Duan H, Huang x, Zheng J, Yu D, Hysteroscopic removal of foreign bodies and its method of monitoring. *Cheng L. Chin Med J (Engl)*.2003;116(1)125-8
6. Goldberg JM, Roberts S. Restoration of fertility after hysteroscopic removal of intrauterine bone fragments. *Obstet Gynecol.* 2008;112(2):470-2
7. Lanzarone VF, Pardey JM. Retained Intrauterine fetal bone as a rare cause of secondary infertility. *Aust N Z J O bstet Gynaecol.* 2009;49(6):700-701.
8. Lewis V, Khan-Dawood F, King M, Beckmann C, Dawood MY. Retention of intrauterine fetal bone increases menstrual prostaglandins. *Obstet Gynecol.* 1990; 775:561-563
9. Makris N, Stefanidis K, Loutradis D, Anastasiadou K, Hatjipappas G, Antsaklis A. The incidence of retained fetal bone revealed in 2000 diagnostic hysteroscopies. *JSLs* 2006;10:76-7
10. Srofenyoh E, Addison M, Dorte B, Kuffour P. Intrauterine retained fetal bones as a cause of secondary infertility. *Ghana Med J* .2006;40(3):105-9.