

CASE REPORT

Postabortal Retained Intra-uterine Fetal Bone as a Cause of Heavy menstrual bleeding and Secondary Infertility

Dr. V.M.Kansara*, Dr. Akash Chikani**, Dr. A.N.Desai***

* Associate, **Resident, ***Prof & HOD, Department of Obstetrics & Gynaecology, GMERS Sola Civil, Ahmedabad

KEYWORDS : Intra-Uterine Retained Fetal Bone, Secondary Infertility

ABSTRACT

Most normal couples achieve a pregnancy within 12 months of trying to get pregnant. Failure to do so after one year may be defined arbitrarily as subfertility, which affects 10-15% of cohabiting couples.

Most cases seen in india are of a secondary form. Amongst the many recognized causes of secondary infertility are complications of a preceding pregnancy which is rare. We described a rare cause of secondary infertility due to prolonged retention of intrauterine fetal bone after MTP done for lactational amenorrhea. Most patients complain of dysmenorrhea, dysfunctional uterine bleeding, pelvic pain, dyspareunia, vaginal discharge or spontaneous passage of fetal bones^[1].

Cases are diagnosed by ultrasound examination, hysterosalpingography and hysteroscopy.

BACKGROUND

Intrauterine retention of fetal bone is a rare complication of abortion, causing menorrhagia, irregular menstrual cycle, secondary infertility, chronic pelvic pain, dysmenorrhea, and vaginal discharge.

A 25 year old female P1L1A1 came with complaints of heavy menstrual bleeding, irregular menstrual cycle and secondary infertility with previous history of MTP done for lactational amenorrhea.

USG was suggestive of hyper echogenic linear shadow in uterine cavity? Foreign body? IUCD? Endometrium with bone tissue?. On hysteroscopy multiple bones were seen, one long bone was occupying both ostia. Removal of fetal bones was done using hysteroscopic grasper in the same sitting. Patient resumed her normal menstrual cycle and later conceived spontaneously. Hysteroscopy is a gold standard for diagnosis and treatment of fetal bones in the uterine cavity.

The case study highlights the importance of ensuring the complete removal of product of conception following medical termination of pregnancy to avoid future complication.

CASE

A 25yrs old bharti married since 7 years with normal sexual life, presented to sola civil gynaecology OPD with heavy menstrual bleeding and secondary infertility. She was P1L1 with one abortion, done for lactational

amenorrhea (gestational age around 12 weeks), 5 years back. Post MTP patient had menorrhagia as she bleed for 10-12 days and was not able to conceive. She was engaged in sex without contraception 3 or 4 times weekly. No past history of tuberculosis and thyroid disorders.

On examination vitals stable, mild pallor present due to menorrhagia, per abdomen-soft non tender, per speculum- cervix and vagina healthy, per vaginal- uterus normal size, anteverted, bilateral fornix free.

Her husband semen analysis was normal. Patient was advised USG pelvis, which showed uterus was size of 8×4.5×2.8 cm. Endometrium measures 6-7 mm. Single linear hyperechoic mass measuring 2×2 cm seen in uterine cavity. Differential diagnosis was suggested as IUCD in the uterine cavity, or foreign body, or bony tissue. Rest bilateral adnexa were normal.

Patient was investigated and diagnostic as well as operative hysteroscopic removal of foreign body from the uterine cavity was planned.

On hysteroscopy multiple fetal bones of various size and shape were present. One long bone was occupying both ostia. Removal of fetal bone was done using hysteroscopic grasper, D&C was done.

Histopathology and microscopic examination showed proliferative endometrium with presence of pieces of immature fetal bone containing a combination of chondrocytes and osteoblasts. The bony component is

Correspondence Address : Dr. Akash Chikani
702, P.G Hostel, GMERS Sola Civil campus, Ahmedabad
Email: akashchikani07@gmail.com

minimally mineralized and consistent with early fetal period of development.

Postoperative period was uneventful. She resumed normal menstrual cycle and conceived spontaneously after 4 months of surgery.

DISCUSSION

Retention of fetal bone in uterus is rare complication of abortion^[2].

A case report by van den bosch et al^[3] showed that uterine intramural bone may affect fertility, but cause infertility by acting like uterine synechiae or as IUCD. Poor fertility outcome is due to increase in local production of prostaglandins which prevents blastocyst implantation^[4].

Diagnosis is made by history of medical termination of pregnancy advanced gestational age, transvaginal ultrasound and hysterosalpingography. Hysteroscopy is valuable tool in both diagnosis and as well as achieving successful removal of retained fetal bone.

Figure 1: Hyper Echogenic Linear Shadow in Uterine Cavity



Figure 2: Hysteroscopically removed retained fragment of fetal bone



Songshu xiao et al^[5] reported a similar case of secondary infertility caused by intrauterine retention of fetal bone with intact morphology for 9 yrs.

Moon et al^[6] reported 11 cases in which retained fragments of fetal bone after second trimester abortion contributed to secondary infertility.

Nalwad BP et al^[7] reported similar case of intrauterine retention of fetal bone acting as a IUCD and causing secondary infertility.

SUMMARY

Intrauterine retention of fetal bone is one of the complications of abortion of advanced gestation. It may lead to abnormal uterine bleeding with secondary infertility and chronic pelvic pain.

Once diagnosed retained fetal bone should be removed surgically with hysteroscope. Hysteroscopy is the gold standard of treatment as it has both diagnostic and therapeutic value. Not only to ensure safety and reduce complication but also timely detection and complete removal under vision guarantees the effectiveness of surgical treatment. Office hysteroscopy can also be used to visualise the uterine cavity.

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