

Retained Fetal Bone as a Cause of Post-Abortal Failure to Conceive

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Citation

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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 describe a rare cause of secondary infertility due to prolonged retention of intrauterine bone after spontaneous abortion. A number of case reports have been published on the prolonged retention of fetal bones up to 23 years after an abortion, either spontaneous or induced^[2]. Most patients complain of dysmenorrhea, dysfunctional uterine bleeding, pelvic pain, dyspareunia, vaginal discharge or spontaneous passage of fetal bones^[1]

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^[4], hysterosalpingography^[1]

^[5] and, in particular, hysteroscopy^[6]. In our case, the patient had no complaints other than secondary infertility.

INTRODUCTION

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.^[1] 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 describe a rare cause of secondary infertility due to prolonged retention of intrauterine bone after spontaneous abortion. A number of case reports have been published on the prolonged retention of fetal bones up to 23 years after an abortion, either spontaneous or induced^[2]. Most patients complain of dysmenorrhea, dysfunctional uterine bleeding, pelvic pain, dyspareunia, vaginal discharge or spontaneous passage of fetal bones^[3]. Cases are discovered by vaginal ultrasound examination^[4], hysterosalpingography^[5] and, in particular, hysteroscopy^[6]. In our case, the patient had no complaints other than secondary infertility.

CASE REPORT

A twenty-six year old woman presented to the gynecological clinic of KVG Hospital, Sullia with a 2-year history of

inability to conceive. She was Para O, abortion 1 (spontaneous abortion at 12 weeks of gestation). She had no noticeable complications. Her menstrual flow resumed about 3 months after the termination. Since then she had regular 28-day cycle, with 4 days of normal menstrual flow. She was married and engaged in sex without contraception 3 or 4 times weekly for the following 2 years. No other clinical problems noted.

Pelvic ultrasound scan revealed an echogenic linear object in the uterine cavity. All other investigations showed normal results. Ultrasound guided retrieval of foreign body with artery forceps was done under aseptic precautions which produced a small-sized bony materials with endometrial tissue, which were sent for histology. Macroscopy showed soft grayish-white piece of bony tissue measuring about 1.5 x 0.5 x 0.2 cm. Microscopy of these showed presence of pieces of immature (fetal) bone containing a combination of chondrocytes and osteoblasts. The bony component is minimally mineralized and consistent with early fetal period of development.

The patient remained amenorrhic for 5 weeks after the procedure, which was confirmed to be pregnancy.

Figure 1

Figure 1: gross-fetal bony spicules

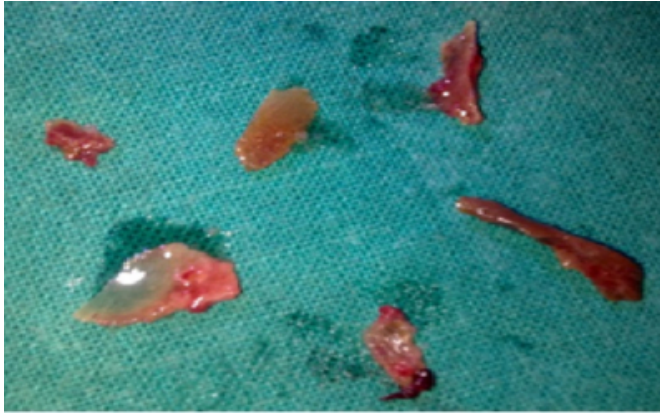


Figure 2

Figure 2: usg -acoustic bone shadow



DISCUSSION

Retained fetal bone following an abortion, as a cause of failure to conceive is a very rare event. Hence this case was a surprise to us as literature was not available in standard text books.

The mechanism of infertility may be similar to that of IUCDs. There might have endometrial inflammatory activity that were not conducive for implantation along with increased tubal motility, inhibited sperm motility. It is amazing to observe that the bones did not cause any of the known complications associated with IUCDs (hemorrhage, pain) despite featuring an excellent contraceptive effect.

We recommend a transvaginal ultrasound or hysteroscopy on every patient with secondary infertility following abortion, regardless of the interval between the preceding termination and presentation. Taking a thorough history is a prerequisite. High success rate may be expected following the removal of any retained bones.

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