

CONTINUOUS AGGRESSIVE OSSEOUS METAPLASIA OF ENDOMETRIUM: A RARE CLINICAL ENTITY

INTRODUCTION: Osseous metaplasia of endometrium results from the transformation of non osseous connective tissue into mature bone. Nearly 80 cases have been reported. In most cases ossification occurred after abortions. The most common presentation is infertility.

CASE REPORT

A 31 year old female P0L0A2 married for 7 years presented with history of secondary infertility for 5 years. She had history of two induced abortions each at around 2 to 2.5 months of gestation around 6 years back. On Gynaecological examination uterus and ovaries were normal. Her menstrual cycles were at regular interval and with normal flow.

MANAGEMENT:

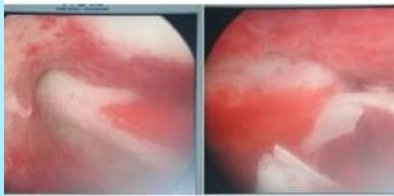
ULTRASOUND: Hyperechoic calcifications reported inside endometrial cavity.

HYSTEROSCOPY: Hysteroscopy was performed with 30 degree hysteroscope with normal saline as Distending media.

In 1st Hysteroscopic sitting Multiple coral white coloured bony tissues were removed which were embedded in the uterine cavity



Patient was kept in follow up and repeat ultrasound still showed calcification. So repeat hysteroscopy was performed in which endometrial cavity was filled with multiple flat bones so again removal of bones were done.



The bones were sent for **Histopathological examination** after 2nd hysteroscopy and the reports were suggestive of **trabeculae of immature bones consistent with fetal bones.**

A 3rd hysteroscopy was performed after 2 months because of intrauterine calcification in ultrasound. This time the cavity was filled with **flat bones with sharp edges and were thicker** than earlier. So gentle removal of few bones were done so as to avoid injury to the uterine cavity. In spite of 3 hysteroscopic sittings the bony tissues could not be removed completely and it was **observed the more the removal of bones were done the more the bones get formed inside the endometrial cavity**



DISCUSSION

Ossification of endometrium is a rare clinical entity. The scientific literature proposes several different explanations which can be summarised in two broad categories:

1. Persistence of embryonic tissues that keep developing after curettage or the appearance of bone tissue as a result of **chronic inflammation** derived from remaining non bony necrotized embryonic tissue.
2. Induction of process of osteogenesis by one's own embryonal cells, provoking osseous differentiation of hypothetical pleuripotential endometrial cells.

Fetal bones might also serve as a source of calcium for ossification but it is possible only for abortions occurring in 2nd trimester.

Osseous metaplasia gets deeply embedded in the uterine mucosa and present the same contraceptive effect as intrauterine contraceptive device.

Endometrial ossification may result in secondary infertility, menstrual irregularities, pain and dysmenorrhoea.

Ultrasound plays an important role showing hyperechoic lesions and is suggestive of osseous tissue and confirmation is done by hysteroscopy.

The literature supports that hysteroscopy can be used as both diagnostic and therapeutic tool.



Recent ultrasound of patient after 3rd hysteroscopy showing calcified lesion.

CONCLUSION:

The present case is different from other cases reported in the literature because of its recurrence and aggressive nature, as a result of which it remained uncured. Surrogacy is the best available option that can be suggested to the patient. The patient will be kept in follow up and in future hysterectomy might be performed.