

Coral Reef Calcification of Endometrium in an Infertile Patient

Kumar Sushil, Awasthi RT, Gokhale N, Kapur A

Department of Obstetrics and Gynecology, INHS Asvini, Naval Hospital, Mumbai.

Key words : endometrial calcification, hysteroscopy, infertility

Introduction

Endometrial calcification occurs sporadically and is often associated with infertility. Previous uterine trauma during instrumentation, prolonged retained products of conception or uterine infection are likely to be involved in their pathogenesis. Very few cases of endometrial calcification are documented in the literature^{1,2,3}. Coral reef calcification appears to be a rare entity. We present one such case.

Case Report

Mrs. SS, a 31 year old woman reported to the infertility clinic in February, 1999 with complaints of inability to conceive. She was living with her husband for the past five years and was having regular unprotected sexual intercourse. Her cycles were regular, 3 - 4/30 days. There was no history of conception in the past. She had pulmonary tuberculosis at the age of five years. There was no other relevant past history. The general, systemic and pelvic examinations were normal.

Investigations

Hb 12gm%, TLC 7,200/cumm, DLC P₇₆ L₂₀ E₃ B₁, ESR 7mm/1st hour, serum calcium 10.8 mg%. Urine - normal.

Semen analysis - within normal limits.

Ultrasonography - uterus normal size, coarse irregular calcification of endometrium present.

X-ray chest NAD. Plain x-ray pelvis - irregular calcification seen.

Hysterosalpingography - Uterine cavity was irregular and there was intravasation of dye around the uterus and into the myometrial vessels.

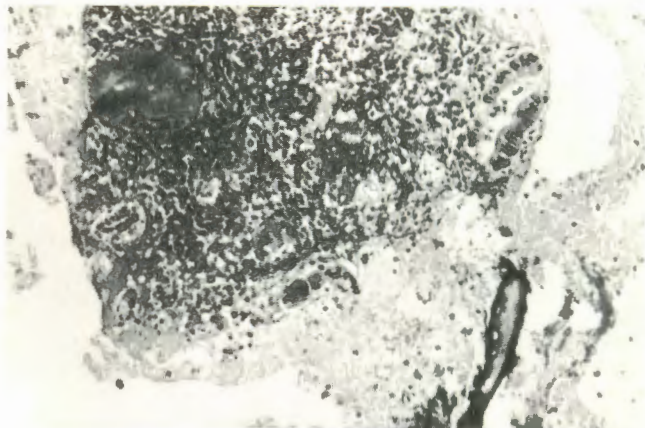
Laparoscopy - Essentially normal findings. No evidence

suggestive of tuberculosis. Chromotubation positive on both sides.

Hysteroscopy - Coral reef calcification of entire posterior wall and patchy calcification of lateral and anterior walls of the uterus were seen (Photograph 1). Endometrial biopsy showed few endometrial glands in proliferative phase, no chorionic villi or decidual tissue and a fragment of cartilage (Photograph 2).



Photograph 1 : Coral reef calcification of endometrium as seen during hysteroscopy.



Photograph 2 : Microphotograph showing multiple endometrial glands and solitary fragment of cartilage with peripheral calcification.

Paper received on 3/12/01 ; accepted on 2/4/02

Correspondence :

Sushil Kumar

Department of Obstetrics and Gynecology,
INHS Sanjivani, Naval Base, Kochi - 682 004.

Endometrial culture was negative for AFB. On the basis of the clinical picture and histopathological examination, the diagnosis of osseous metaplasia of endometrium was made. Extensive hysteroscopic resection of calcified endometrium was done in December, 1999. Cu-T was placed inside the uterus (after removing the copper element) to avoid adhesions between the anterior and posterior walls. The patient was given tablet ethinyl estradiol 0.05 mg daily for three months to stimulate the growth of endometrium. The intrauterine device was removed after three months. The patient could be followed up for subsequent six months only. She had regular menstrual cycles but had not conceived.

Discussion

During the course of investigations, while doing hysteroscopy, when we peeped through the hysteroscope our first impression was "Oh! There is a coral reef in the uterus" and therefore we named it as coral reef calcification. Coral is a limestone formation formed in the sea by millions of tiny animals. When the animals die, they leave limestone "skeletons" that form the foundations of ridges in the sea called coral reefs.

This patient did not give any history of pregnancy. Therefore, it is difficult to answer whether the calcification took place on previously undiagnosed retained products of conception (undiagnosed missed abortion) or by osseous metaplasia of the endometrium.

Osseous metaplasia of the endometrium causing infertility is reported by Bahceci and Demirel¹ and Garcia et al². Pace et al³ have reported successful hysteroscopic management of endometrial ossification.

References

1. Bahceci M, Demirel LC. Osseous metaplasia of the endometrium: a rare cause of infertility and its hysteroscopic management. *Hum Reprod* 1996; 11: 2537-9.
2. Garcia Leon F, Kably Ambe A. Osseous metaplasia of the endometrium as a cause of infertility. Hysteroscopic approach. *Ginecol Obstet Mex* 1999; 67: 37-41.
3. Pace S, Torcia F, Palazzetti PL et al. Successful diagnostic and surgical hysteroscopy for endometrial ossification. *Clin Exp Obstet Gynecol* 2001; 28: 24-5.