

# Osseous metaplasia of the endometrium – An unusual clinical case

## Metaplasia óssea endometrial – Um caso clínico incomum

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### Abstract

Endometrial osseous metaplasia is a rare non-neoplastic transformation in which the endometrial stroma is replaced by bone and cartilage. It is more frequently observed after repeated miscarriages and is associated with secondary infertility. The authors report a case of an endometrial osseous metaplasia with an uncommon presentation.

**Keywords:** Osseous metaplasia; Endometrium.

### Resumo

A metaplasia óssea endometrial corresponde a uma transformação não-neoplásica rara na qual o estroma endometrial é substituído por osso e cartilagem. É uma condição mais frequente após abortamentos de repetição, sendo associada a infertilidade secundária. Os autores relatam um caso de uma apresentação incomum de metaplasia óssea endometrial.

**Palavras-chave:** Metaplasia óssea; Endométrio.

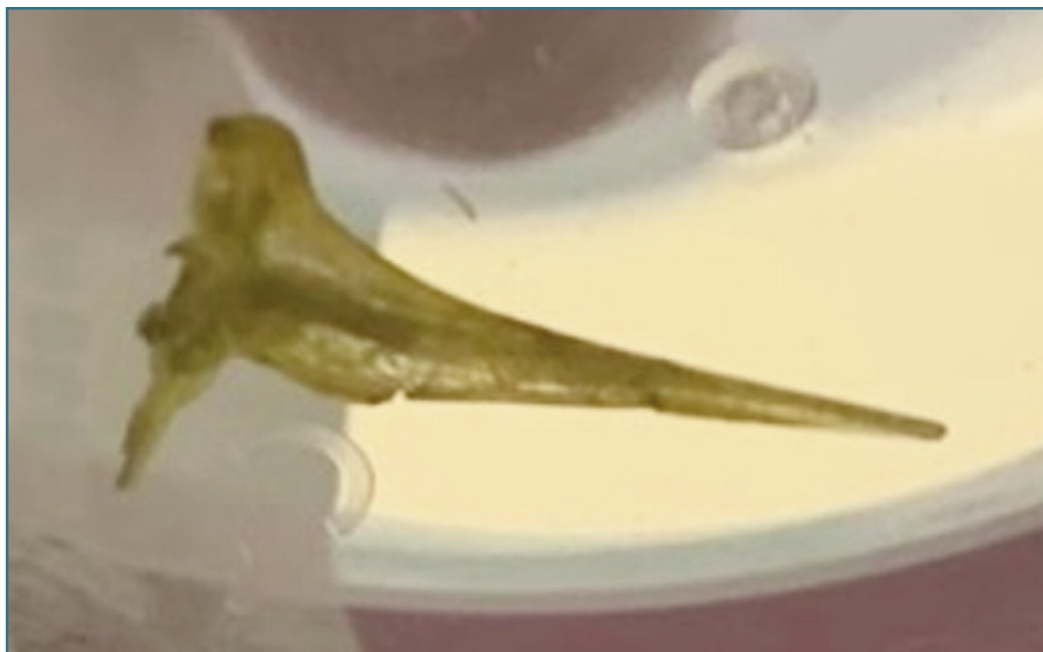
Endometrial osseous metaplasia is a condition characterized by the presence of mature or immature bone tissue in the endometrium<sup>1</sup>. It is a rare condition, with an estimated incidence of 3 per 100,000<sup>1</sup>. It is often associated with secondary infertility following abortion, chronic endometritis or the presence of foreign bodies in the endometrium<sup>1,2</sup>. Clinically, some women are asymptomatic, while others exhibit menstrual irregularities, pelvic pain, dyspareunia, or abnormal vaginal discharge<sup>1,3,4</sup>.

A 53-year-old Caucasian woman, Gravida 2, Para 2, was referred to our centre for a gynecology appointment due to positive Human Papillomavirus (HPV) test for HPV 18 and negative cytology for intraepithelial lesion or malignancy (NILM). She had chronic hypertension, class 1 obesity and no history of infections or surgeries. She reached menopause at age 44 years. The

only contraceptive method previously used was combined hormonal contraception for 17 years.

During the first appointment, a colposcopy with endocervical curettage was performed. One week after, she requested an urgent evaluation due to an acute episode of intense hypogastric abdominal pain, described as stabbing, associated with the expulsion of a hard, T-shaped foreign body from the vagina, accompanied by vulvovaginal burning. The patient denied previous similar episodes. There was no prior history of foreign body insertion in the vagina and/or uterine cavity. On physical examination, she presented vulvovaginal atrophy with no other alterations. The foreign body was sent for pathological examination (Figure 1). The patient underwent a gynecological ultrasound two years before, with no significant findings, showing a regular endometrium with a thickness of 3 mm. Four irregular greenish fragments of hard, amorphous material with a bony appearance were described

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**FIGURE 1.** Irregular greenish fragment of hard amorphous material, with a bony appearance.

macroscopically. Histological examination showed an inert foreign body with characteristics of bone tissue. After clinical-pathological integration, the most consistent diagnosis is endometrial osseous metaplasia of unknown etiology, as the patient does not present a history of any known factors associated with the condition.

Osseous metaplasia of the endometrium is a rare and clinically heterogeneous condition. This case report underscores its occurrence, emphasizing that it does not necessarily correlate with a history of prior abortion.

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#### AUTHOR'S CONTRIBUTION

MC – wrote and review the manuscript. MX – review the manuscript. MEP – attended the patient during the appointments and review the manuscript.

#### CONFLICTS OF INTEREST

There are no conflicts of interest.

#### PATIENT CONSENT

Informed consent was obtained.

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