

# The Incidence of Retained Fetal Bone Revealed in 2000 Diagnostic Hysteroscopies

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## ABSTRACT

Three of 2000 diagnostic hysteroscopies revealed residual fetal bony fragments in women with abnormal uterine bleeding. Removal of bony fragments by hysteroscopy is associated with therapeutic success.

**Key Words:** Fetal bone, Diagnostic, Hysteroscopy.

## INTRODUCTION

The presence of intrauterine bone structures is a rare condition. The exact incidence is unclear.<sup>1</sup> In our hospital, we found 3 cases of retained fetal bone fragments in 2000 diagnostic hysteroscopies (0.15%). We describe herein 3 patients referred to our clinic because of a foreign body in the uterine cavity and persistent uterine bleeding.

## CASE REPORT 1

A 30-year-old woman, G6P1A5, was referred to our Hysteroscopic Unit because of irregular vaginal bleeding. A routine pelvic ultrasound performed before hysteroscopy revealed the presence of a foreign body. Hysteroscopy revealed an endometrial cavity without intrauterine device (IUD) and a fundal endometrial mass that was removed with a resectoscope. On histological examination, these specimens proved to contain fragments of bone.

## CASE REPORT 2

A 28-year-old woman, G3P2A1, was referred to our Hysteroscopic Unit complaining of irregular vaginal bleeding. A routine pelvic ultrasound performed before hysteroscopy revealed the presence of a foreign body. Hysteroscopy revealed longitudinal structures (**Figure 1**), that were removed by the resectoscope. On histological examination these specimens were seen to contain 4 fragments of bone.

## CASE REPORT 3

A 37-year-old woman, G3P2A1, was referred to our Hysteroscopic Unit because of irregular vaginal bleeding. A routine pelvic ultrasound performed before hysteroscopy revealed a 1.5-cm mass in diameter at the fundus of the uterus. On day 1 of the next menstrual period, the woman received 3.75 mg of Arvekap (IPSEN, Sweden). Hysteroscopy was performed 20 days after this injection. Hysteroscopy revealed bony fragments that were removed resectoscopically.

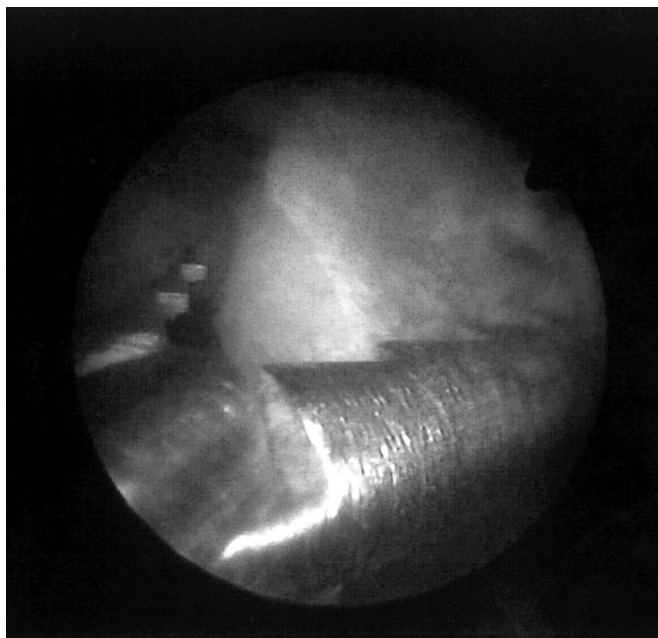
## DISCUSSION

The presence of intrauterine bony structures has been reported in the literature.<sup>2,3</sup> These structures are most

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**Figure 1.** Hysteroscopic view of the retained bone fragments.

commonly believed to be due to retained fetal bone fragments, but some cases may be due to metaplasia of mature endometrial stromal cells, in response to chronic inflammation or trauma.<sup>4,5</sup>

In a number of cases reported in the literature,<sup>6,7</sup> the major patient complaints were secondary infertility, irregular vaginal bleeding, cervicitis, vaginitis, and spontaneous passage of fetal bones. In our study, all 3 women presented with irregular vaginal bleeding. Kazakov et al<sup>8</sup> reported removing 69 foreign bodies hysteroscopically from the uterine cavity; 11.9% of them were fetal bone fragments. In our study, the 3 foreign bodies removed hysteroscopically from the uteri were fetal bone fragments.

In a recent publication, Elford and Claman<sup>9</sup> suggest dilatation and curettage with intraoperative abdominal ultrasound assistance to ensure that all abnormal tissue is removed. In our studies, ultrasound showed an echogenic area, and hysteroscopy revealed the bone fragments. In the third case, we used GnRh analogues before the procedure. This preoperative drug therapy helped us to see all the abnormal tissue and to remove these retained bones more easily. In a recent publication, Bakhshi et al<sup>10</sup> demonstrated that diagnostic hysteroscopy followed by an operative procedure using a loop resectoscope is invaluable in both establishing the diagnosis and removing bony fragments. The differential diagnosis of endometrial

ossification with abnormal uterine bleeding should include other endometrial pathologies, such as mixed mesodermal tumors of the endometrium. For these reasons, in our opinion, hysteroscopy with biopsies remains the first choice in the evaluation of abnormal uterine bleeding.

## CONCLUSION

This study attempts for the first time to give the incidence of retained fetal bone (0.15%) in women undergoing diagnostic hysteroscopy. This also demonstrates that retained fetal bone in the uterus could occur as a result of mid-trimester abortion causing abnormal uterine bleeding. In our study all women had previous abortion.

Removal of bony fragments by hysteroscopy was associated with therapeutic success in all 3 cases.

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