

A Rare Case of Intrauterine Retained Foetal Bones Clinically Presenting with Pelvic Pain and Dysmenorrhea Following First Trimester Medical Termination of Pregnancy

Case Report

Swati Kshirsagar¹, Shreyas Masrani², Pratima Patil², Ajay Gupta² and Debraj Saha^{2*}

¹Head of Department Bharat Ratna Dr Babasaheb Ambedkar Municipal Hospital, Kandivali (W), Mumbai, India

²Department Bharat Ratna Dr Babasaheb Ambedkar Municipal Hospital, Kandivali (W), Mumbai, India

*Corresponding author: Dr. Debraj Saha MD, Radiodiagnosis, Senior Resident, Bharat Ratna Dr Babasaheb Ambedkar Municipal Hospital, Kandivali (W), Mumbai. Mob: 9830081757; Email: debrajdon7521@gmail.com

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Abstract

Background/Objective: There are various causes of dysmenorrhea and abnormal uterine bleeding; namely endometrial polyp, endometrial hyperplasia and carcinoma; bleeding diathesis; fibroid uterus; and hormonal dysfunctions. When a patient comes to the emergency with pelvic pain and abnormal uterine bleeding, these causes must be ruled out. However, in a patient who has undergone first-trimester abortion recently, there is another cause which we need to keep in mind and that is intrauterine retention of foetal bones.

Materials and Methods/Learning Objective: She was advised CECT pelvis and MRI pelvis outside (in a private diagnostic centre) for evaluation of the abdominal pain. Once referred to our institute, transvaginal ultrasound was performed by the head of the department of radiodiagnosis of the institute.

Results/Imaging findings: Contrast-enhanced Computed Tomography scan of the Pelvis revealed a bulky uterus with hyperdense content seen extending from the endometrium to the serosa through the myometrium; with associated collection in the right adnexa; suggesting sealed-off perforation. MRI pelvis confirmed the findings mentioned in the CECT scan.

Transvaginal Ultrasound- It was reported as linear calcific structures seen in the endometrium with posterior acoustic shadowing in the lower and middle part of the body of the uterus. It was seen extending to the myometrium with possible perforation through the right lateral wall into the right adnexa.

Conclusion: These days, when there are alternative medical methods of performing medical termination of pregnancy, procedures like dilation and curettage must be avoided as much as possible. However, in a case of a female patient presenting with abnormal uterine bleeding post-medical termination of pregnancy, a high degree of suspicion must be raised to look out for intrauterine retained foetal bones. A transvaginal scan done by a trained radiologist should be enough to confidently diagnose the condition if it happens.

Introduction

There are various causes of dysmenorrhea and abnormal uterine bleeding; namely endometrial polyp, endometrial hyperplasia and carcinoma; bleeding diathesis; fibroid uterus; and hormonal dysfunctions. [1] When a patient comes to the emergency with pelvic

pain and abnormal uterine bleeding, these causes must be ruled out. However, in a patient who has undergone first-trimester abortion recently, there is another cause which we need to keep in mind and that is intrauterine retention of foetal bones. [2] Intrauterine foetal bones may present with dysmenorrhea, abnormal uterine bleeding, pelvic pain and secondary infertility.

Case Report

A 27-year-old female (PIL1A1) with a previous history of full-term vaginal delivery underwent first-trimester Medical Termination of Pregnancy (by dilation and curettage) at 3 months of amenorrhea. She came to the gynaecological department with complaints of post-procedural discharge and bleeding for 2 weeks; and pain in the abdomen for 1 week.

She was advised CECT pelvis and MRI pelvis outside (in a private diagnostic centre) for evaluation of the abdominal pain.

Contrast-enhanced Computed Tomography scan of the Pelvis revealed a bulky uterus with hyperdense content seen extending from the endometrium to the serosa through the myometrium; with associated collection in the right adnexa; suggesting sealed-off perforation. The hyperdense content was mentioned as a possible organized hematoma. MRI pelvis confirmed the findings mentioned in the CECT scan.

She was admitted to our hospital for its management and the patient was sent to our department for ultrasonography.

Transvaginal ultrasound was performed by the head of the department of radiodiagnosis of the institute. It was reported as linear calcific structures seen in the endometrium with posterior acoustic shadowing in the lower and middle parts of the body of the uterus. It was seen extending to the myometrium with possible perforation through the right lateral wall into the right adnexa. The diagnosis was given as retained intra-uterine foetal bones; with associated sealed-off perforation (Figure 1-6).



Figure 3: Scout image shows a small hyperdense structure in the middle of the pelvis just superior to the right superior pubic ramus.

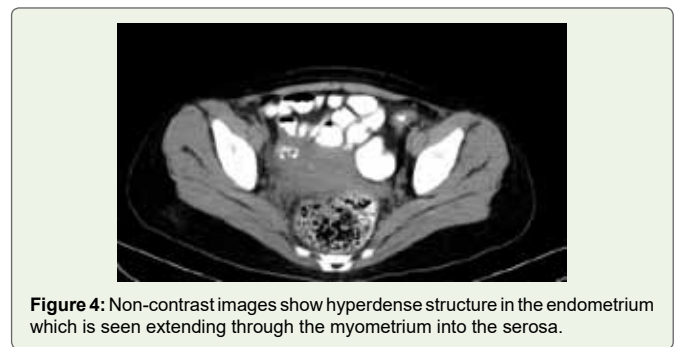


Figure 4: Non-contrast images show hyperdense structure in the endometrium which is seen extending through the myometrium into the serosa.



Figure 1: Transvaginal ultrasound reveals hyperechoic structures in the endometrial cavity extending to the serosa through the myometrium.

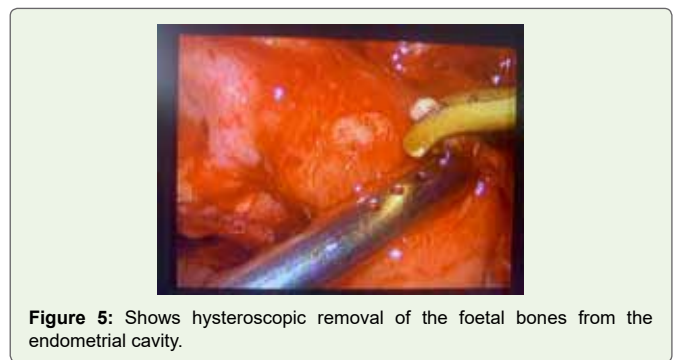


Figure 5: Shows hysteroscopic removal of the foetal bones from the endometrial cavity.



Figure 2: Transvaginal ultrasound reveals long hyperechoic structure in the endometrial cavity.



Figure 6: Shows post-operative specimens of foetal bones which were retrieved from the endometrial cavity.

Management

Under all aseptic guidelines and proper consent, the patient was posted for surgical removal of the foetal bone through the hysteroscopy route. 3 bones were retrieved and the diagnosis made by transvaginal ultrasound was confirmed.

No complications occurred during the procedure and the patient was discharged after 7 days. The complaints of dysmenorrhea, chronic pelvic pain and abnormal uterine bleeding have stopped.

Discussion

Medical termination of pregnancy is one of the most neglected problems in our country. [3] Retained foetal bones in a rare complication of unsafe abortion. The incidence is 0.15% in patients undergoing diagnostic hysteroscopy. [4]

Menstrual blood volume and prostaglandin concentration were measured by Lewis et al; before and after the removal of retained foetal bones.[5] The menstrual blood volume and total prostaglandin concentration were reduced to half after the removal of foetal bones. In our case, abnormal uterine bleeding probably occurred through the same mechanism.[6]

After 12 weeks of gestation, any foetus is capable of enchondral ossification.[7] The bones appear as hyperechogenic areas with posterior shadowing. This is important as deeply embedded bones are likely to be missed on hysteroscopy.[8] Treatment of retained foetal bone is removal either through evacuation by conventional method or under hysteroscopic guidance. Relief of symptoms is dramatic.[9]

Conclusion

These days, when there are alternative medical methods of performing medical termination of pregnancy, procedures like dilation and curettage must be avoided as much as possible. However, in a case of a female patient presenting with abnormal uterine bleeding

post-medical termination of pregnancy, a high degree of suspicion must be raised to look out for intrauterine retained foetal bones. A transvaginal scan done by a trained radiologist should be enough to confidently diagnose the condition if it happens. Often in these cases, cross-sectional imaging is not as helpful as a transvaginal ultrasound.

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