

An unusual case of retained abdominal pregnancy for 36 years in a postmenopausal woman

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ABSTRACT

Abdominal pregnancy is a rare form of ectopic pregnancy which occurs due to ruptured uterine or tubal pregnancy into the abdomen. Fetal loss is a common complication of these pregnancies and patient presents with acute abdominal pain which is a surgical emergency. Another rare but established complication of this ectopic pregnancy is fetal demise with the dead fetus being retained in the abdomen. It gets macerated and mummified over a period of time and is mostly detected incidentally during imaging. Radiological imaging has hallmark appearances of such a macerated fetus showing multiple fetal parts embedded in a calcified sac termed as lithopedion or stone baby. We report a unique case of retained abdominal pregnancy for 36 years in a 60-year-old postmenopausal female presented with abdominal pain and difficulty in micturition. Computed tomography showed multiple fetal bones in the abdomen surrounded by a membrane which was surprisingly not calcified.

Key words: Abdominal pregnancy, computed tomography, macerated fetus, magnetic resonance imaging

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INTRODUCTION

The incidence of abdominal pregnancy is less, that is, 1:1,000 pregnancies and it is associated with high maternal mortality (0–20%).^[1] If the abdominal pregnancy remains undetected and untreated and if fetal demise occurs, lithopedion formation, that is, calcification of fetal parts and surrounding membranes is an expected outcome. Lithopedion formation occurs in 1.5–1.8% abdominal pregnancies.^[1,2] However, overall incidence of lithopedion of all gestations is remarkably less, that is, 0.0054%.^[1,2] Less than 300 cases have been reported in 400 years of world medical literature.^[2] It is unusual for the dead fetus to remain in the abdomen for a long period, and it

is mostly detected on imaging done for other reasons. The duration of retention of the dead fetus varies between 4 and 70 years (in our case the duration is 36 years). Age of the patient ranges between 30 and 100 years.^[3] Our case is exceptional not only in terms of duration of the retention of dead fetus and age of the patient but also the fact that the retained fetus was of approximately 37 weeks of gestation, that is, term gestation and lack of calcification of fetal parts and membranes.

CASE REPORT

A 60-year-old, uneducated female patient came with chief complaints of pain in the abdomen (pricking type), fullness in the abdomen, burning in micturition, and constipation on and off, since 2 months. Patient gave history of one episode of bleeding per rectum. Patient was a hypertensive detected 2 months back and was on antihypertensive medication. She had attained menopause 8 years back. Her husband had died 2 years back. Patient was P4L4A0, one male, and three female children. All the deliveries took place at home and were uneventful. Patient gave history of being pregnant approximately 36 years back and had visited rural health care center for decreased fetal movement where fetal demise was diagnosed. Patient was discharged against medical advice and went to a quack for treatment.

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She gave a history of reduction in abdominal girth thereafter. The patient discontinued the treatment from the quack.

Her blood investigations revealed low (6.9 g%) hemoglobin with RBCs showing anisocytosis and mild hypochromia. Urine routine examination was normal. Kidney function tests were within normal limits.

On examination, abdomen was soft and nontender. Fullness was seen in the hypogastrium extending to the infraumbilical region.

During the period of 36 years, no ultrasound was done until the patient became symptomatic. Ultrasound of the abdomen was done outside before patient presented to our hospital. Only report mentioning a large calcified mass was with the patient.

Patient underwent computed tomography (CT) study of abdomen (plain and post contrast study) which revealed a well-defined, encapsulated sac containing multiple fetal bones surrounded by a hypo dense rim in the pelvis extending into the abdomen [Figure 1]. No fetal or rim calcification was seen. A small fat density focus was seen on the right side of the lesion. A femur like bone was seen with the presence of an epiphysis at its end. The length of this bone was corresponding to 37 weeks of gestation [Figure 2]. Ovaries could not be differentiated. Bilateral, mild hydronephrosis and hydroureter was noted due to mass effect over the lower ureters by the lesion. Fat planes between the lesion and sigmoid colon were lost. However, fat planes between rests of the bowel loops were well-maintained.

Magnetic resonance imaging (MRI) study of abdomen and pelvis largely confirmed the CT findings did not show any soft tissue organs within and showed right ovary in close proximity to the lesion and uterus was seen separate from the lesion [Figure 2].

Laparotomy was done and well-encapsulated, macerated fetus was removed [Figure 3]. During bowel adhesiolysis, sigmoid colon was torn which was closed, and ileostomy was done. Uterus and both the ovaries were preserved as they were uninvolved.

DISCUSSION

Abdominal pregnancy mostly occurs due to rupture of tubal or ovarian ectopic pregnancy into the abdominal cavity. Both fetal and maternal prognosis is poor due to scarcity of blood supply to the fetus and intra-abdominal hemorrhages and sepsis in mother. If the placenta gets attached to the organ with avid blood supply, successful fetal outcome may be seen. The conditions which are essential for the formation of lithopedion are survival of the fetus for more than 3 months, sterile fetus,



Figure 1: Coronal postcontrast computed tomography image, delayed scan shows encapsulated lesion in the lower abdomen with multiple bony structures within with dilated pelvicalyceal system and ureters on both the sides



Figure 2: Magnetic resonance imaging T2-weighted sagittal section shows well-defined lesion in pelvis posterior and separate from the uterus



Figure 3: Postoperative picture of multiple fetal bones

and failure of detection and presence of the condition suitable for calcium deposition.^[4]

The incidence of abdominal pregnancy is related to the frequency of ectopic gestation in the population, educational and socioeconomic status of the patient, availability of health care services and their utilization.^[5] Risk factors for this ectopic gestation include pelvic inflammatory diseases, endometriosis, previous ectopic pregnancies, and congenital tubal/uterine anomalies.^[6,7] In our case, patient's lack of education, low socioeconomic status, and negligence toward available health care system resulted in late presentation and complications. These are major issues in developing countries like India.

Clinical presentations in abdominal pregnancy are like tubal ectopic in the first trimester. As pregnancy advances, less symptomatology makes suspicion unlikely which is the probable cause of retention of the dead fetus for a long duration. In such cases, patient presents with lower abdominal pain, constipation, urinary complaints (as in our case) resulting from pressure effect. Diagnosis of these cases is rare on clinical grounds alone. Mostly, the cases are diagnosed on imaging done for the symptoms of the patients resulting from mass effect. Radiograph shows fetal parts surrounded by the calcified rim in the abdomen. Ultrasound appearances are nonspecific and show well-defined lesion showing hyperechoic areas with posterior acoustic shadowing.^[2] CT scan and MRI are the imaging modality to diagnose which show multiple fetal skeleton embedded in a sac which may or may not be calcified. Relationship and invasion with adjacent organs are well documented by CT and MRI, the understanding of which is necessary prior to the intervention.

D'Aunoy and King^[8] have suggested four possibilities which an abdominal fetus may undergo if not removed:

- Skeletonization, where only the fetal bones remain while rest of the parts get absorbed, as seen in our case
- Adipocere, where the soft parts are replaced by fatty acids, soaps, and salts of palmitic and stearic acids
- Suppuration, where the fetus is destroyed due to infection. Sometimes abscess formation occurs which may rupture into the vagina, rectum, adjacent bowel, and fetal bones

are passed through any of the body's orifices, including the mouth

- Lithopedion Formation occurs if the fetus remains sterile and infiltrated with calcium salts. Surrounding membrane also shows calcification.

Hallmark radiological picture differentiates it from other calcified lesion viz. ovarian neoplasm, myomas, inflammatory masses, teratoma or urinary tract, and bladder tumors.^[3]

Surgical removal is a treatment option in all the cases.

CONCLUSION

Advanced abdominal pregnancy retained for 36 years in a 60-year-old postmenopausal woman is a rare phenomenon. Imaging modalities particularly CT and MRI play a crucial role not only in diagnosing this condition but also establishing a relationship with adjacent organs which helps in surgical planning.

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