



A Perplexing Case of Lithopedion Masquerading as Subserosal Fibroid

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Received: 25 July 2021 / Accepted: 2 January 2022 / Published online: 11 February 2022
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Keywords Abdominal pregnancy · Lithopedion · Subserosal fibroid

Introduction

The first record of this strange phenomenon can be found in the tenth century by Albucahis, a surgeon of Arabic era of medicine. When an extrauterine pregnancy, after fetal demise continues to get a low volume vascular supply, it may undergo a process of calcification spanning over many years. Instead of reabsorbing a stone child is formed. It is a favorable outcome of advanced abdominal pregnancy, attempting to encase the noxious products of dead fetus from reaching maternal circulation. This may go unnoticed for many years to decades of the original incidence of ectopic gestation. [1]

Case Report

A 36-year-old lady married for 20 years, Para 3 attended Gynaecology outpatient department with complaints of intermittent pain and swelling of lower abdomen over a period of one and half year. There was no history of any acute episode of pain or Missed periods. Her last childbirth was ten years back followed by puerperal tubal ligation. On clinical evaluation, there was a stony hard abdominal-pelvic mass reaching up to the umbilicus with restricted mobility in all directions. The external genitalia was apparently normal. Systemic examination revealed no abnormality. Ultrasonography suggested the probability of a calcified subserosal fibroid. On laparotomy, pelvic structures were covered by

omental adhesions, after dissection, a stony hard mass measuring 15 × 12 cms in right adnexa was visible. Mass was in close vicinity to the uterus and right ovary. Fallopian tube of same side could not be traced out. There were no ascites. The rest of the abdominal cavity was normal (left tube and ovary were normal-looking) Differential diagnoses of ovarian teratoma, calcified leiomyoma of the uterus, lithopedion, and calcification of epiploic appendages kept in mind. As patient belongs to a tribal community and was resident of an isolated Nicobar group of islands with low level of education and poor socioeconomic status with doubtful compliance to follow up. Moreover the mass was suspicious looking and patient had completed her family Decision for hysterectomy along with removal of right adnexal mass was undertaken. Patiently stood the procedure well with the uneventful post-operative period. The specimen was sent histopathological examination. Cut surface of right adnexal mass revealed a macerated fetus with well-formed spine covered with calcified shell (Fig. 1). Microscopic examination also supported the same. Consequently, the Lithopedion diagnosis was supported radiologically, which reveals fetal skull, spines, ribs, and tubular bones (Fig. 2).

Discussion

Lithopedion as an outcome of advanced abdominal pregnancy is a rare occurrence. The incidence of abdominal pregnancy is 1:11,000 and lithopedion occurs in 1.5–1.8% of these cases. So far around 400 cases of lithopedion had been reported in world medical literature [2]. For abdominal pregnancy to change into lithopedion following requisites should be met: (1) it should be an extrauterine pregnancy. (2) Escaped the medical attention for more than first 4 months. (3) Sterile environment. (4) Poor vascularity. (5) Condition conducive for calcium deposition [3].

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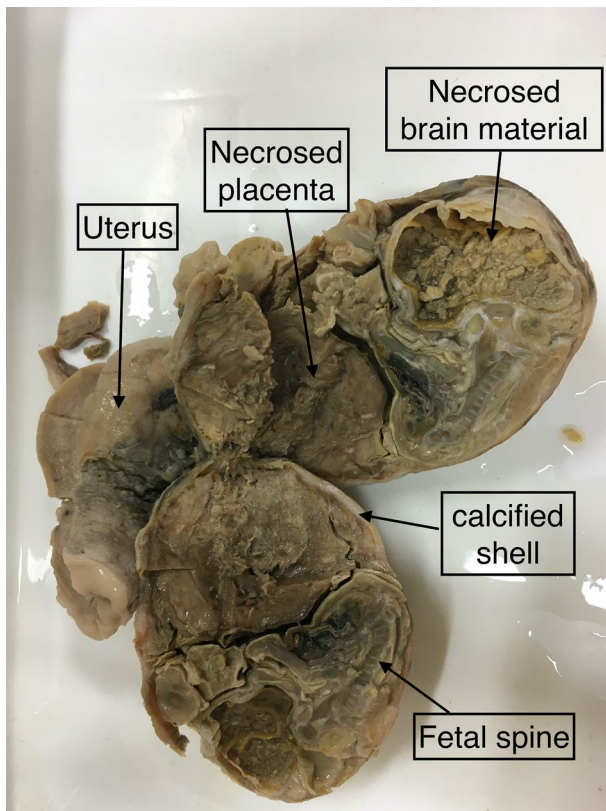


Fig. 1 Gross image of the right adnexal mass showing macerated fetus with calcified shell

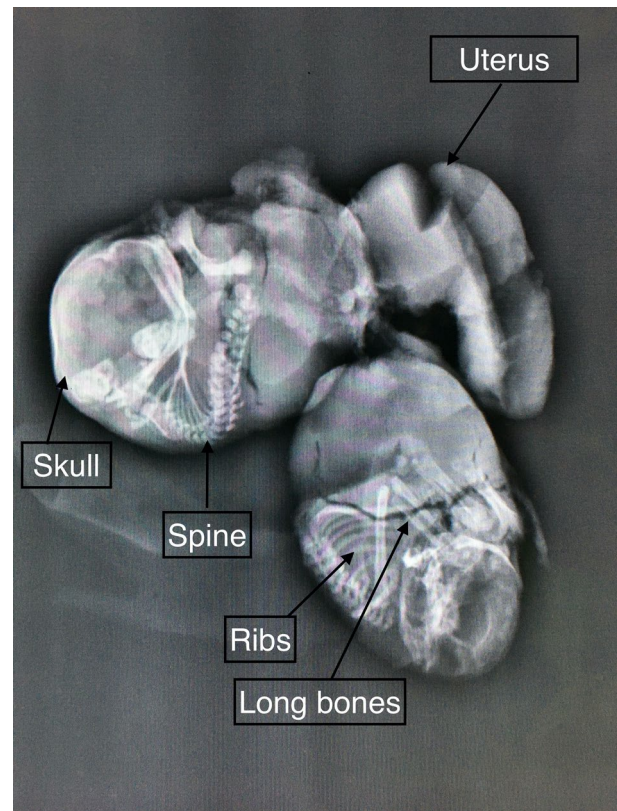


Fig. 2 Plain X-ray showing fetal skull, well-formed spine, ribs, and long bones

Küchenmeister classic article in 1881 remains fundamental in classifying the evolution of lithopedion based on calcification being at the level of the fetus, membranes, and/or placenta as follows: (1) Lithokelyphos (eggshell): calcification involving the membranes with minimal or no calcification of the fetus. (2) Lithokelyphopedion (stone sheath child): calcification involving both the membranes and fetus. (3) True Lithopedion (stone child): fetus is completely calcified with negligible involvement of the membranes [2].

Age at presentation of lithopedion vary from 30 to 100 years, 2/3 read of them being over 40 years. The duration of fetal retention ranges from 4 to 70 years [1]. The long period of retention is accountable for the part that lithopedion does not produce any specific symptoms. Most of the cases were discovered incidentally when a patient seeks medical help for some other nonspecific symptoms. In some rare cases the patient may also present with complication due to prolonged retention of lithopedion like urinary incontinence, faecal incontinence, intestinal obstruction, and in extreme cases extrusion of fetal parts through umbilicus and/or vagina [4].

Lithopedion is a rare entity with no specific symptoms poses a diagnostic challenge and may perplex the clinician. Moreover, usage may be fallacious and does not differentiate

lithopedion with calcified subserosal fibroid and ovarian teratoma. A plain X-ray abdomen is inexpensive tool may clinch the definite diagnosis in suspicious cases of hard abdominal lump [2].

So far the best line of management and treatment had not been reported, but most agree with surgical removal of the lithopedion when diagnosed even when the patient is asymptomatic because it will be a challenge to manage the lithopedion induced complication which it can hold due to prolonged retention.

Conclusion

Despite the improved antenatal care and advancement of imaging techniques, a rare phenomenon like lithopedion can often be missed due to nonspecific symptoms and clinical findings. Moreover, in reproductive age group, this diagnosis is often confused with calcified fibroid. Precise diagnosis and surgical management are required to avoid unforeseen complications of lithopedion.

Acknowledgments The authors acknowledge the help of Dr. A. K. Mandal and Dr. M. K. Saha of ANIIMS.

Authors contribution Contributions: S.Y., P.S., S.C., M.M.; Study concept: S.Y., P.S.; Study design: S.Y.; Data acquisition: S.Y., P.S.; Data analysis: S.Y.; Literature search: S.Y.; Manuscript preparation: S.Y., P.S., S.C.; Manuscript editing: S.Y., P.S., S.C.; Manuscript review: S.Y., P.S., S.C., M.M.

Declarations

Conflict of interest All authors declare that they have no conflict of interest.

Ethical statements The authors certify that they have obtained consent from patient to publish images, clinical, pathological and radiological information in any medical journal. The patient understands that his/her name and initials will not be published and due efforts will be made to conceal his/her identity. But, anonymity cannot be guaranteed.

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