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Case Report

Undetected Ectopic Fetal Demise for more than 4 Decades Leading to Development of Lithopedion- A Case Report

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Abstract
Background: *Abdominal pregnancy is an extremely rare condition, and even more uncommon is the prolonged retention of an advanced case resulting in lithopedion formation. Here, we present the case of an elderly woman with long-term retention of an advanced abdominal pregnancy.*
Case Report: *This is a case report of a 77-year-old female with a palpable abdominal mass which on radiological investigations suggested to be a lithopedion, undetected for more than 4 decades. An exploratory laparotomy was done and the stone baby was delivered successfully.*
Conclusion: *Abdominal pregnancies often follow a complicated course, making management decisions challenging. This case highlights a rare outcome of an advanced abdominal pregnancy and demonstrates an unconventional approach to its management.*
Keywords: Lithopedion, Stone baby, Ectopic pregnancy, Calcified baby, Calcified mass.

Introduction

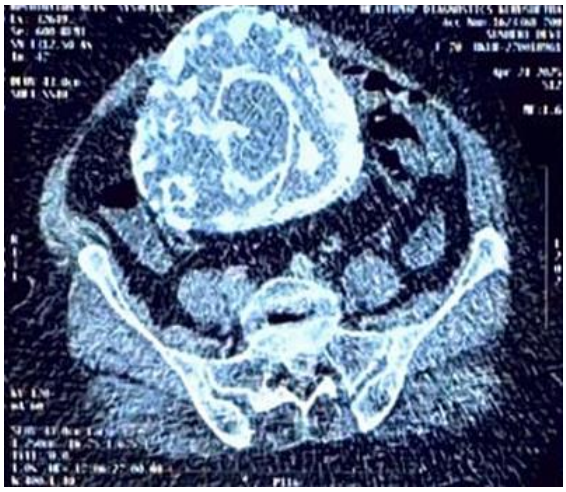
Lithopedion—a term derived from the Greek words *lithos* (stone) and *paidion* (child)—refers to a rare medical condition in which a deceased foetus becomes calcified inside the mother's body, essentially turning to "stone." This rare complication arises when a foetus dies during an ectopic pregnancy and is too large for the body to reabsorb. In such cases, the body isolates the fetus by encasing it in calcium deposits, preventing infection.[1] Diagnosing lithopedion can be challenging due to its wide range of clinical presentations. In many instances, it remains asymptomatic and is discovered incidentally during imaging for unrelated conditions. However, it can also present with abdominal pain, gastrointestinal symptoms, or be mistaken for other masses. This rare case highlights the impact of limited health literacy, along with strong religious and cultural influences, in delaying timely diagnosis and intervention.[2]

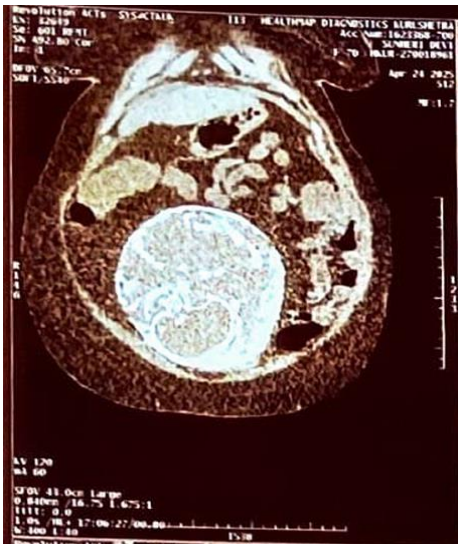
Case Report

A 77-year-old woman with a body mass index of 27 kg/m2 was admitted to the hospital with complain of abdominal pain. Abdominal examination revealed a soft abdomen with a ventral hernia and a palpable abdominal mass around the umbilical region, hard in consistency and with restricted mobility. She was a known case of hyperthyroidism with a clinically evident neck swelling which on examination and investigations was suggestive of retrosternal goitre. MRI whole abdomen was suggestive of a well defined apparently encapsulated globular lesion noted in the abdominal cavity in midline involving the umbilicus and hypogastric region. This region is apparently composed of fetal parts, components of gestation/ placenta like structures which appears slightly distorted. The lesion measures 12.5x14,7x16,6cm. Multiple areas of blooming on GRE suggesting calcification noted in the lesion. Anteriorly, the lesion is indenting the posterior aspect of anterior abdominal wall. Posteriorly, it is reaching till the pre-aortic location. Laterally, the lesion is displacing the bowel loops. The lesion is seen away from and cranial to the uterus and is reaching till the infra pancreatic region-findings are suggestive of Lithopedion.

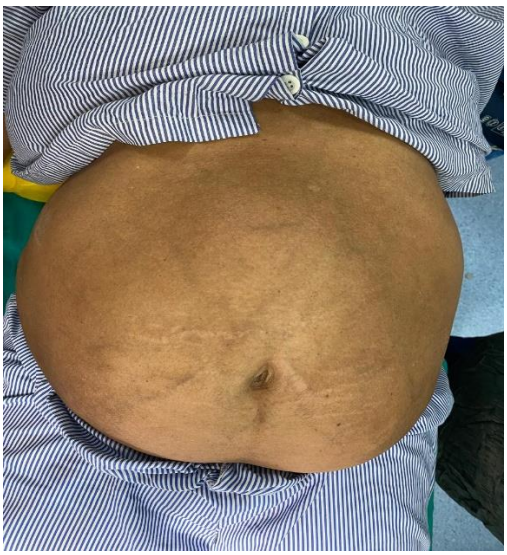
A provisional diagnosis of lithopedion was established, and an exploratory laparotomy was performed via a midline incision to provide optimal exposure of the pelvic and lower abdominal regions. Upon entry into the peritoneal cavity, a firm, calcified, ossified mass enveloped in a dense fibrous membrane was identified. The mass exhibited extensive adhesions to adjacent bowel loops and omental tissue and was vascularized by branches from the fallopian tube. Careful microdissection was undertaken to delineate and control the feeding vessels. The mass was subsequently excised en bloc without inadvertent injury to surrounding viscera and bowel loops.

This case posed significant challenges from an anaesthesia perspective due to the presence of a retrosternal thyroid and postoperative lung complications related to COVID-19.

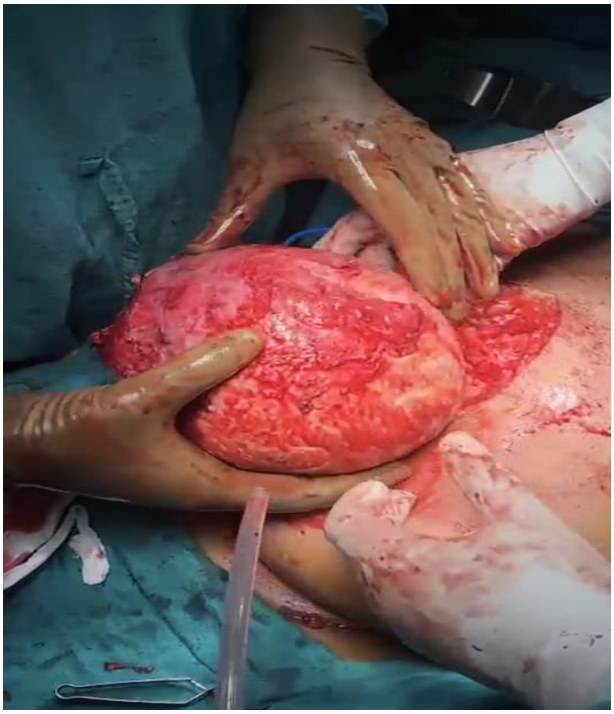




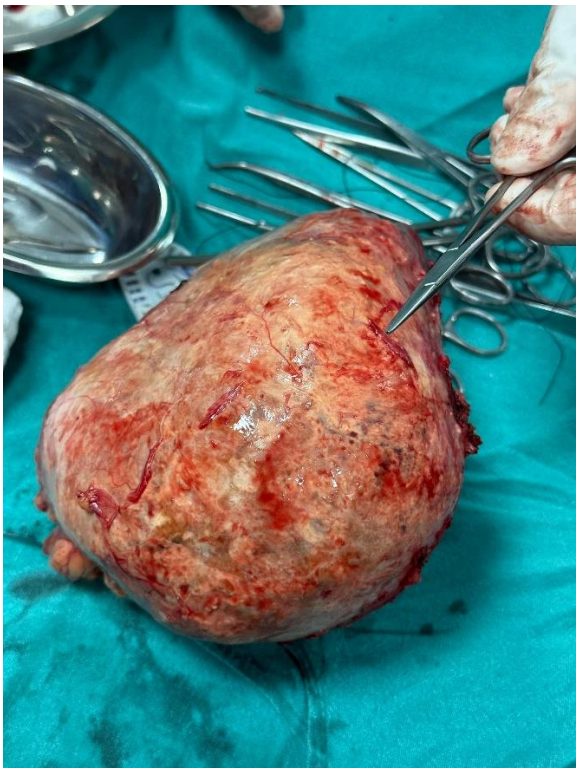
Radiological Evidence

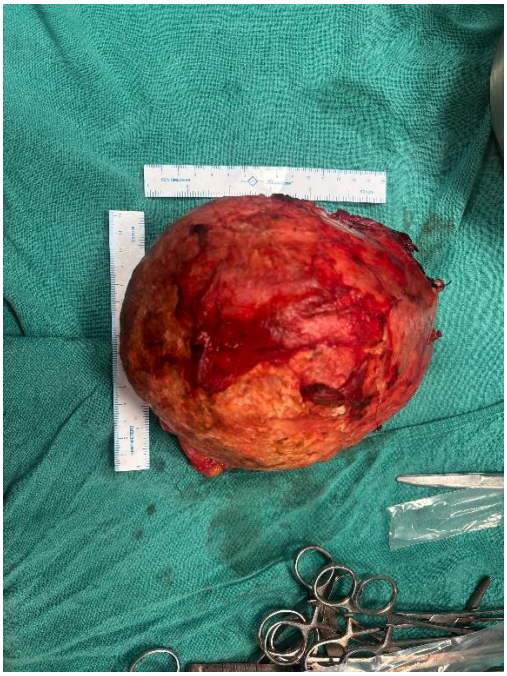


Pre-Operative View



Intraoperative View





Specimen of Dead Calcified Foetus

Discussion

Abdominal ectopic pregnancy is a rare form of extrauterine gestation—accounting for less than 1% of all ectopic pregnancies—with the majority resulting from secondary implantation following tubal rupture or abortion, though primary implantation directly on peritoneal surfaces can also occur. In rare cases, the fertilized ovum escapes the fallopian tube—whose fimbrial ends open into the peritoneal cavity—and implants primarily onto the peritoneum.[3]

Many abdominal ectopic pregnancies remain undetected and may resolve spontaneously if fetal demise occurs before approximately 12–14 weeks, when fetal bones are still cartilaginous and can be fully resorbed. However, when fetal loss occurs later in gestation—after the onset of skeletal mineralization—the residual fetal tissue may exceed the body's resorptive capacity. [4]In such scenarios, the maternal immune system treats the fetal remnants as foreign bodies and deposits calcium around them, leading to calcification, "mummification," and eventual transformation into a lithopedion, thereby reducing the risk of infection.[5]

Most cases of lithopedion remain asymptomatic for an extended period around 4 to 60 years while some present with chronic abdominal pain. According to studies, the foetal demise in a majority (43 %) of cases of lithopedia occurs at term, followed by 7 to 8 months (27 %) and 3 to 6 months (20 %) of pregnancy.[6]

Conditions such as ovarian teratomas, uterine fibroids, calcified neoplasms, calcified aneurysms, inflammatory masses, and epiploic calcifications may present with a calcified abdominopelvic mass and diagnosing a lithopedion can be challenging due to lack of specific clinical signs or symptoms. In the present case, the non-specific appearance of the calcified mass necessitated imaging for a definitive diagnosis. MRI was done to confirm the diagonosis. The occurrence of complications even after several years makes surgical removal the best therapeutic choice for lithopedion, especially since the post-operative course is generally simple.

Multiple studies have associated lithopedion cases with lower socioeconomic status and insufficient prenatal care, which are often linked to limited health literacy and reduced awareness of pregnancy-related healthcare. These studies have demonstrated that persistent challenges—such as limited health literacy, deeply rooted cultural practices, and strong religious beliefs—often result in delayed healthcare-seeking behaviour among individuals, thereby precluding them from obtaining timely and appropriate medical care. In the present case, these delays in access and diagnosis were directly implicated in the development of a lithopedion.[7,8]

The global decline in lithopedion cases can be attributed to expanded access to prenatal care and significant improvements in diagnostic imaging, enabling early differentiation between ectopic and intrauterine pregnancies.[9] Furthermore, strengthening reproductive and general health literacy—particularly in low- and middle-income countries encourages timely engagement with healthcare services. Evidence shows that investments in sexual and reproductive health lead to substantial increases in antenatal visits and facility-based deliveries, resulting in better pregnancy outcomes and reduced chronic complications. Thus, promoting such awareness at a community level holds considerable promise for alleviating the public health burden related to rare complications like lithopedion.[10,11]

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