

Lithopedion: A Case Report Presenting with Intestinal Obstruction and Review of Literature

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Abstract

“Lithopedion” is Greek word which means “Stone Baby.” Lithopedion is a calcified fetus resulting from an extra-uterine pregnancy. They constitute around 1.5-2% of all ectopic pregnancies and 0.0054% of all gestations. Only around 400 cases reported in the history. Most patients remain asymptomatic for years, but the treatment plan must be individualized according to patient's presentation and age. Complications do occur very rarely, and their management is very difficult. Here, we have described a 50-year-old lady presenting with intestinal obstruction. Diagnosis was confirmed by suggestive clinical history and X-ray abdomen. Laparotomy and retrieval of the lithopedion done. Post-operative recovery was uneventful.

Key words: Intestinal obstruction, Lithopedion, Stone baby

INTRODUCTION

“Lithopedion” is Greek word which means “Stone Baby.” They constitute around 1.5-2% of all ectopic pregnancies and 0.0054% of all gestations. Patients ages vary from 20 to 100 years, from whom around two-third being over 40 years.¹ Our patient age is 50 years. The period of lithopedion retention varies from 4 to 60 years but in the history, 18 months has been reported.¹ In our case, the retention period is around 28-year. As with most cases of lithopedion, our case is completely unaware of the fetus. Complications do occur very rarely.² Detection of lithopedion is a harsh reminder of the antenatal care and also consideration of poor socio-economic status and cultural attitudes.^{3,4} The treatment plan must be individualized and take into account the presentation, age, and symptoms of the patients.

CASE REPORT

A 50 years post-menopausal female from low economic status presented to surgery outpatient department with

chief complain of intermittent dull aching pain in the right iliac fossa since 28 years. It is associated with dyspepsia, occasional vomiting, pain, and distention of abdomen since 7 days. There was no history of fever, loss of appetite, hematemesis, and malena. She was married since 36 years and blessed with 3 children. Last delivery has occurred 28 years back. Abdomen was soft, distended with visible peristalsis, no hepato-splenomegaly, a hard irregular mass (10 cm × 15 cm) palpable in the right iliac fossa, which had a nodular surface, restricted mobility, ballotable. No other mass palpable. Other systemic examinations were normal. On X-ray abdomen, a large irregular calcified mass detected at the right iliac fossa (Figure 1). Ultrasonography shows a calcified mass in the right iliac fossa without visceral involvement, could be fecal matter. Contrast-enhanced computed tomography (CT) could not done due to poverty and emergency. On laparotomy, a calcified irregular mass entrapped in omentum present in the right iliac fossa was found. On retrieval partially developed fetal structure detected wrapped in the omentum and placed in the paracecal area. There was minimal adhesion to the serosa of ascending colon and the distal part of the ileum which was the cause of obstruction. Adhesiolysis with omentectomy was done and on the removal of the omentum from the mass, the fetal appearance with skull, spine, and long bones were clearly demarcated making the diagnosis of extra-uterine intra-abdominal mummified fetus (Figures 2 and 3). Recovery was uneventful.

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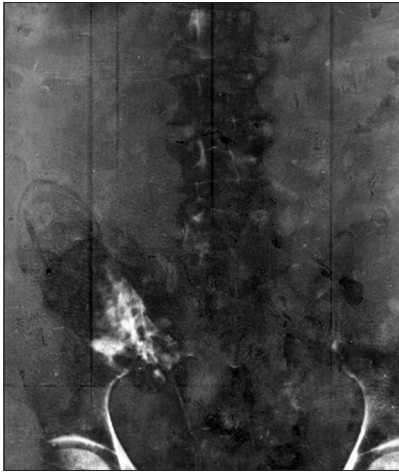


Figure 1: X-ray abdomen and pelvis (anterior-posterior-view) showing fetal shape calcification in the right iliac fossa

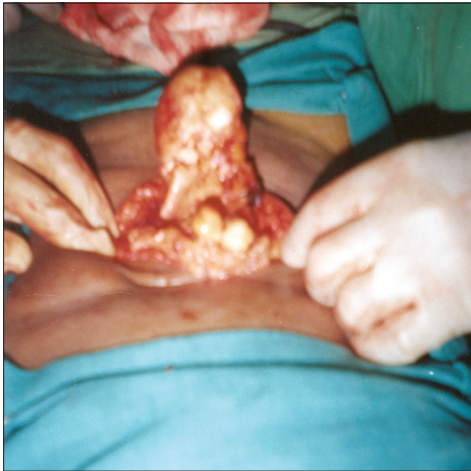


Figure 2: Fetal structure wrapped in omentum, adherent to ascending colon and distal ileum



Figure 3: The fetal appearance with skull, spine, and long bones

DISCUSSION

Until now only around 400 cases documented of Lithopedion in history.⁵ Patients ages vary from 20 to 100 years.¹ About 2/3rd of all patients are over the age of 40 years. The youngest recorded patient was only 20 years old. The period of lithopedion retention varies from 4 to 60 years. The earliest period of lithopedion retention diagnosed in literature is 18 months.¹ Lithopedion typically arises in sterile dead extra-uterine fetus after 3 months of gestation period where sluggish blood circulation and local condition is conducive for calcium precipitation.⁴

It is usually enough to confirm the diagnosis from the suggestive clinical history, a palpable mass on physical examination and radiological finding by an abdominal X-ray film. Symptoms usually non-specific and chronic, e.g. vague abdominal pain and constipation. Abdominal X-ray film is an inexpensive screening tool that can confirm the diagnosis. Whenever necessary CT, magnetic resonance imaging, or barium enema can be done for planning the surgical approach.

During 1100 BC, the earliest lithopedion was found in an archeological excavation at Bering Sinkhole, on the Edwards Plateau in Kerr County, Texas.² In the 10th century, physician Albucasis first described lithopedion. Madame Colombe Chatri, a 68-year-old French woman, was the first reported case of lithopedion. After her death in 1982, an autopsy revealed a fully developed stone baby in her abdominal cavity for 28 years.⁶ A series of 47 cases of lithopedion was reviewed by the German physician Friedrich Kuchenmeister in 1880 and identified three subgroups: (1) Lithokelyphos (only membrane is calcified), (2) lithokelyphopiedion (both membrane and fetus is calcified), and (3) true lithopedion (mainly fetus is calcified, membrane minimally calcified).

Lithopedion by secondary abdominal implantation as a consequence of ruptured tubal pregnancy is very rare. Complications do occur very rarely, e.g. bladder or rectal perforation, volvulus, intestinal or urinary obstruction, extrusion of fetal parts through the abdominal wall, rectum, vagina, and abscess formation.^{2,7} Our case presented with intestinal obstruction. It is very much difficult to manage a lithopedion induced complication situation, so they should undergo surgical extirpation even if asymptomatic. The treatment plan must be individualized and take into account the presentation, age, and symptoms of the patients. According to experience, surgical extirpation can be done by open or laparoscopic approach.⁸

CONCLUSION

Management of lithopedion complications is very difficult. So, whenever possible surgical extirpation should be done even if the patient is asymptomatic.

REFERENCES

1. Ede J, Sobnach S, Castillo F, Bhyat A, Corbett JH. The lithopedion - an unusual cause of an abdominal mass. *S Afr J Surg* 2011;49:140-1.
2. Spirtos NM, Eisenkop SM, Mishell DR Jr. Lithokelyphos. A case report and literature review. *J Reprod Med* 1987;32:43-6.
3. Lachman N, Satyapal KS, Kalideen JM, Moodley TR. Lithopedion: A case report. *Clin Anat* 2001;14:52-4.
4. N'Gbesso RD, Coulibaly A, Quenum G, N'Goan AM, Diabaté K, Koné M, *et al.* A rare etiology of abdominal calcifications: Lithopedion. *J Radiol* 1998;79:683-6.
5. Medhi R, Nath B, Mallick MP. Lithopedion diagnosed during infertility workup: A case report. *Springerplus* 2014 19;3:151.
6. Bondeson J. The earliest known case of a lithopedion. *J R Soc Med* 1996;89:113-8.
7. Irick MB, Kitsos CN, O'Leary JA. Therapeutic aspects in the management of a lithopedion. *Am Surg* 1970;36:232-4.
8. Kumar SS, Murthy AS, Kumar DM, Navukarasu RT. Laparoscopic removal of lithopaedion. *Indian J Surg* 2013;75 Suppl 1:38-40.

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