

Old Abdominal Pregnancy Presenting as an Ovarian Neoplasm

Abdominal pregnancy is extremely rare, but even more unusual is the prolonged retention of an advanced abdominal pregnancy with lithopedion formation. The presentation of lithopedion as an ovarian tumor without a symptom has not been reported in Korea. A 63-yr-old, gravida 2, para 1, woman was referred to us with an abdominal mass. Pelvic examination revealed normal postmenopausal uterus and a fetal head-sized movable hard mass in the lower abdomen. The computed tomographic scan showed a densely echogenic mass of 10-cm in diameter as an ovarian neoplasm. Laparotomy disclosed a lithopedion, of which the bones and cartilages were well preserved. There have been controversies on the treatment of lithopedion. Although some cases are stable for a long time, the morbidity increases when the operation is performed in an elderly patient. So we believe that the surgical intervention should be done as soon as possible after thorough consideration of the morbidity and the risk.

Key Words : Pregnancy, Abdominal; Lithopedion; Ovarian Neoplasms

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INTRODUCTION

The incidence of abdominal pregnancy varies from one in 372 to one in 9,714 live births; and the abdominal pregnancy is associated with high morbidity and mortality (1). The lithopedion formation, a dead fetus undergoing intra-abdominal calcification instead of spontaneous resorption, is an unusual complication. There has been only a single report on presentation of lithopedion as an ovarian neoplasm in the literature (2). We herein report the second such case.

CASE REPORT

A 63-yr-old, gravida 2, para 1, woman was referred to our hospital for a palpable abdominal mass with a 40-yr history. The patient had recently suffered from urinary frequency and lower abdominal discomfort and was recommended for further evaluation of the mass at a local clinic. Pelvic examination revealed a normal postmenopausal uterus and a fetal head-sized movable hard mass in the lower abdomen. We supposed the mass to be a calcified myoma or a solid adnexal tumor. The sonographic findings revealed a huge densely calcified mass suggesting an ovarian tumor. The abdominopelvic computed tomographic scan revealed a highly calcified mass in the midline of the lower abdomen, which appeared to be a solid ovarian tumor such as teratoma. The tumor markers were within normal limits. The size, the consistency of the mass, and the old age of the patient lead

us to conclude that the mass would be a low-grade malignant ovarian tumor and that exploratory laparotomy was needed. During laparotomy, a well-demarcated stony hard and 11 × 11 × 8 cm-sized mass was found embedded within the omentum, and was resected from the omental bed. The right adnexa were atrophied but the tubal isthmic portion was calcified, and therefore the right salpingo-oophorectomy was performed. The atrophied and small genital tract as usual as in the most postmenopausal women made us abandon the consideration of the possibility of low-grade malignant ovarian tumor, so we did not do any further procedures. We supposed that it would be a calcified omental or mesenteric tumor rather than an ovarian tumor.

Until this point, we had never suspected that the mass could be a lithopedion. On further questioning, the patient reported that she had become pregnant 40 yr before and that the pregnancy had continued for about 9-10 months with fetal movement and abdominal distension, until she experienced a vaginal bleeding without any signs of labor. Because of poor accessibility to doctors and hospitals, she stayed at home and sought the alternative medicine such as herb medication. After some time, the fetal movement and the abdominal distension disappeared and the palpable mass developed. Two years later, she became pregnant again and successfully delivered a daughter, who was 38 yr old at the time the patient was admitted to our hospital. From history taking, we suspected the possibility of old advanced abdominal pregnancy.

On gross pathologic examination, the mass showed a glistening, stony hard calcified external surface. After decalcifica-

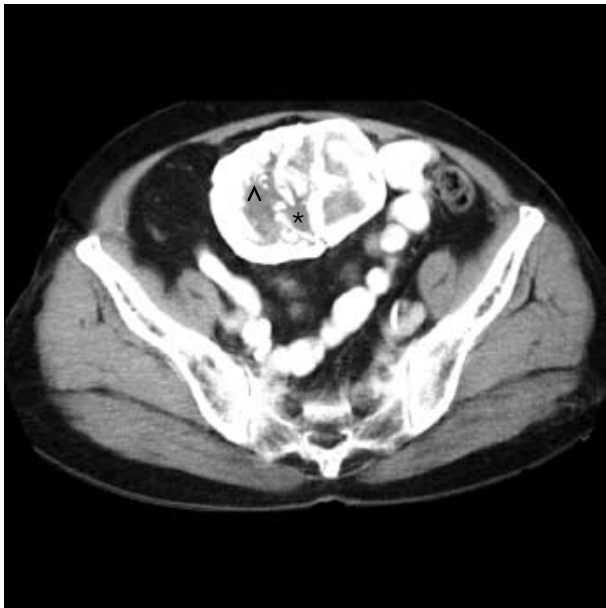


Fig. 1. Computed tomographic scan shows a densely calcified round mass in pelvic cavity. The long bone (*) and ribs (^) are well visualized within the mass.

tion, the mass was sectioned and found to be composed of mummified tissues, bones, and cartilages that were compatible with fetal long bones and ribs. So we concluded that the mass was a lithopedion. Then we reevaluated the computed tomographic scan and found the fetal bones (Fig. 1). After operation, the patient recovered more slowly than usual because of intestinal obstruction. However, she finally completely recovered and was discharged.

DISCUSSION

Abdominal pregnancies are rare, and usually are the secondary to tubal rupture or tubal abortion. In any case, the morbidity and the mortality rate would be expected to be high (3) if the pregnancy was advanced. Abdominal pregnancies can have a complex course, and decisions on their management may be difficult, because intraabdominal placental separation and hemorrhage should be avoided (4). Once the diagnosis of an abdominal pregnancy is made, surgical intervention is necessary because of the high mortality and morbidity of the advanced pregnancy, and the methotrexate treat-

ment is contraindicated because of the potential sepsis and death (1).

Sometimes an abdominal pregnancy undergoes calcification instead of being absorbed, resulting in a lithopedion, but this is extremely rare and difficult to diagnose and manage. A lithopedion is sometimes detected as a palpable abdominal or pelvic mass on a routine physical examination, but most cases are incidentally found during surgery or on radiographic studies of the abdomen or pelvis (5). Complications after lithopedion formation include volvulus of the cecum (6), intestinal obstruction (7), and abscess formation (8). Some authors believe that surgical intervention is needed for a lithopedion, which has been incidentally found, because of such associated complications, while others observed no untoward consequences without a surgical intervention and some reports have confirmed the stability of lithopedion (9). Although some cases are stable for a long time, the morbidity increases when the operation is performed in an elderly patient. So we believe that the surgical intervention is needed as soon as possible after thorough consideration of the morbidity and the risk.

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