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CLINICAL IMAGE

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Huge fetal ovarian cyst

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Abstract

Most fetal ovarian cysts increase in size during the late stages of pregnancy. Early treatment of a huge neonatal cyst may reduce the risk of gastrointestinal obstruction.

KEYWORDS

fetal ovarian cyst, fetal tumor, intestinal obstruction, neonatal laparoscopic surgery

A 33-year-old woman (gravida 2, para 1) was diagnosed with a fetal abdominal tumor at gestational week 31. Ultrasonography revealed a large cyst (5 cm) containing a daughter cyst in the left lower abdomen of the female fetus (Figure 1A); the size increased to 7.5 cm at week 34, when the patient required hospitalization due to cervical shortening and uterine contractions. Intravenous magnesium sulfate was administered continuously. However, the fetal abdominal circumference increased to 35.7 cm at week 35 + 3. Fetal cyst aspiration was considered but not performed as the placenta was located on the anterior uterine wall (Figure 1A). Tocolysis was discontinued

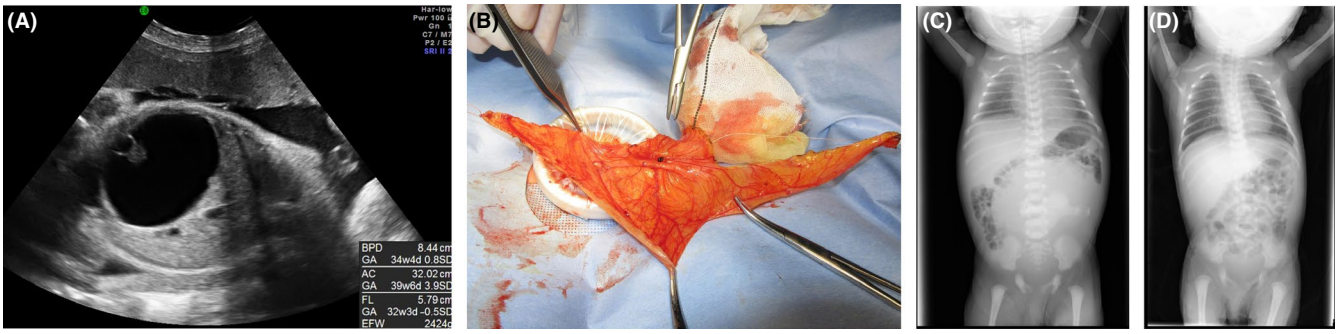

FIGURE 1 A, A fetal abdominal cyst is observed in the left lower abdomen, with a daughter cyst inside. The placenta was located on the anterior uterine wall, making fetal cyst aspiration difficult. B, Laparoscopic ovarian cystectomy was performed on the newborn. C, Preoperative lateral X-ray image showing a huge abdominal tumor that could possibly cause intestinal obstruction. D, Postoperative X-ray exam. The gastrointestinal obstruction was significantly resolved

considering the risk of gastrointestinal obstruction and torsion.[1] The fetus (2929 g; abdominal circumference: 37 cm) was delivered at week 35 + 5 following spontaneous labor, with no evidence of rupture or torsion. However, lateral radiographs showed a huge abdominal tumor that could lead to intestinal obstruction in the near future. Laparoscopic surgery was performed on day 5 (Figure 1B) via an umbilical incision. A huge cyst was identified originating from the left ovary; the right ovary was of normal size. Following ovarian cystectomy, the histopathology showed a partially luteinized granular layer on the cyst wall. The baby recovered uneventfully (Figure 1C,D) and was discharged 25 days postbirth.

Most fetal ovarian cysts increase in size during late stages of pregnancy, possibly due to effects of estradiol and gonadotropin.[2] Early treatment of huge neonatal cysts may reduce gastrointestinal complications.

CONFLICT OF INTEREST

The authors have no conflict of interest to declare about this article.

AUTHOR CONTRIBUTIONS

LW and ES: involved in manuscript writing; TI, AI, YI, HK, IH, KC, KI, and TK: involved in the management of the patients; KT: approved the study.

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