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# Spontaneous Resolution of a Sonographically Complicated Fetal Ovarian Cyst

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We present a case in which the prenatal sonographic appearance of a fetal ovarian cyst strongly suggested a twisted ovarian cyst. This cyst changed to an anechoic area at the neonatal sonographic examination and disappeared on a study at 3 months of life. To our

knowledge this is the first evidence to data for spontaneous involution of such a cyst.

## CASE REPORT

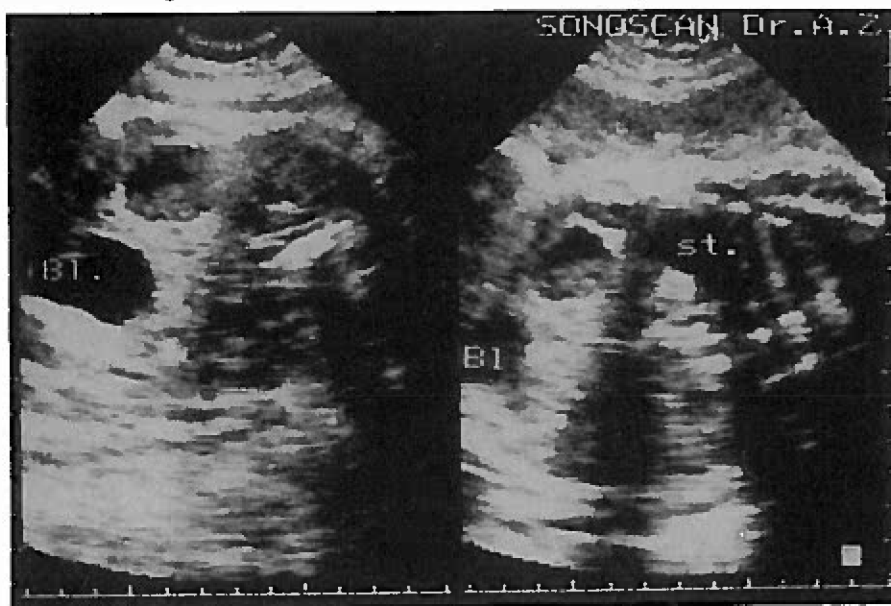
A 29 year old woman, gravida 4, para 2, underwent sonography for a gestation control ultrasound. The relevant obstetrical history shows a previous cesarean section for fetal distress with stillbirth as the outcome. No other significant information was noted relating to obstetrical, familial, or medical history. The first sonogram obtained demonstrated a female fetus with standard growth measurements consistent

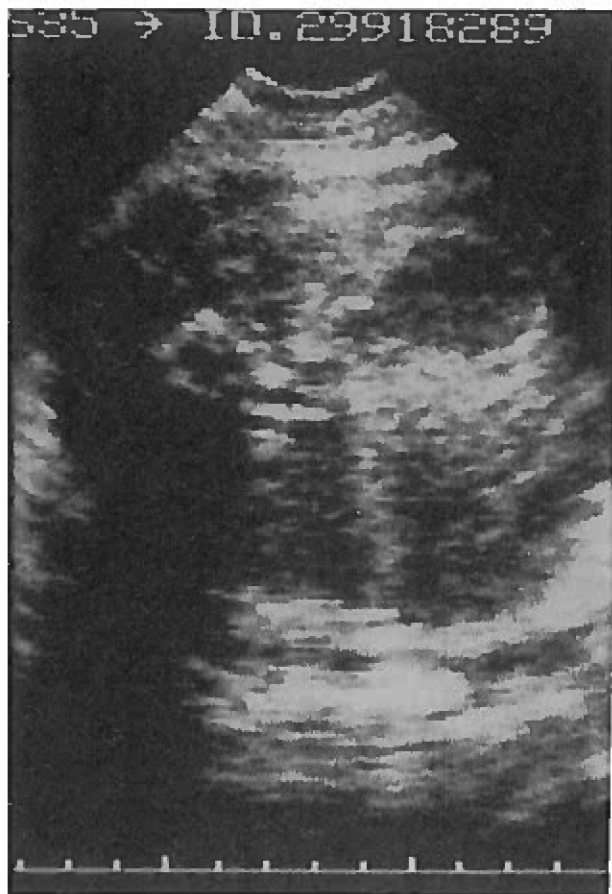
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**Figure 1** Coronal view through the fetal stomach (st), urinary bladder (bl), and the cyst (note the fluid-debris level).

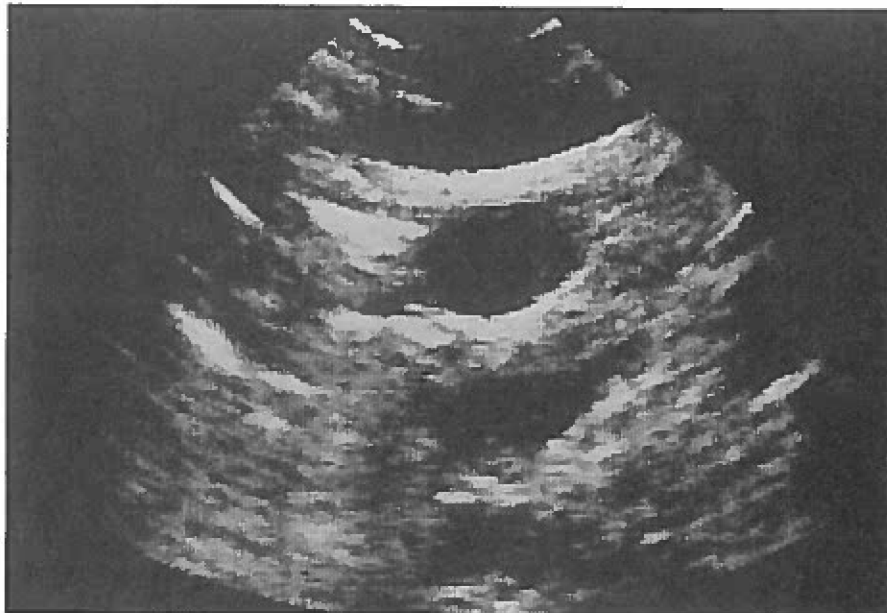




**Figure 2** Transverse scan of Figure 1 showing the gross and echogenic cyst wall. The fetal spine is to the right.

with 34 weeks of gestation, in cephalic presentation, with a somewhat rounded cyst 2.7 cm in diameter. This cyst had an echogenic wall, contained a fluid-debris level that occupied almost the inner half of the mass, and was located above and

**Figure 3** Longitudinal view of the left adnexal cyst 18 days after birth. The cyst is completely anechoic, with no echogenic wall. The fluid-debris level vanished.

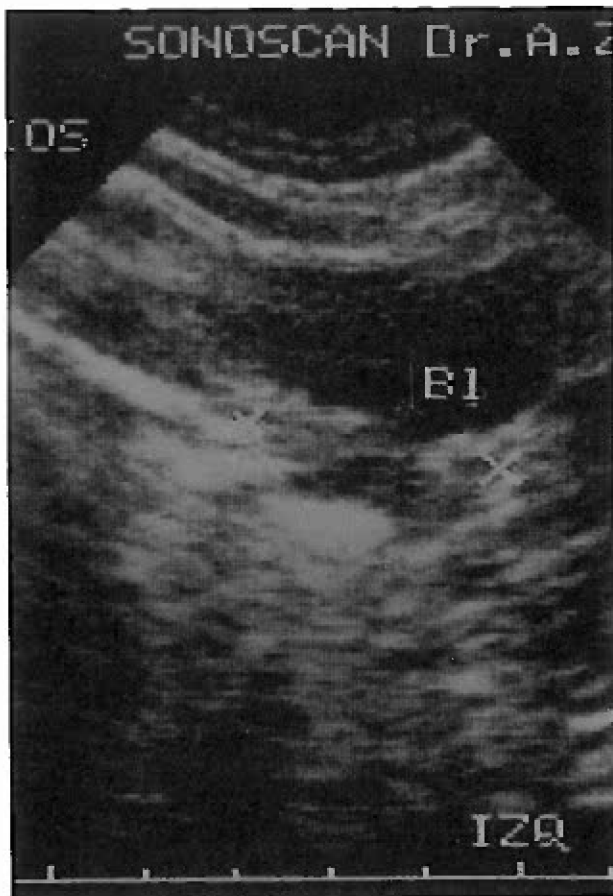


to the left of the urinary bladder and below the stomach (Figs. 1 and 2). The delivery was by another cesarean section for maternal indications. A baby girl weighing 2,720 g with Apgar scores of 8 and 10 at 1 and 5 minutes was delivered. The newborn was completely asymptomatic with a generally good condition and normal laboratory test results. Given the relatively small size of the cyst, conservative treatment was chosen. At the sonographic study done at 18 days of age, the cyst had become anechoic, without a fluid-debris level, was slightly decreased in size (2.5 cm), had lost its original wall echogenicity, and became ovoid (Fig. 3). Sonographic exploration at 3 months of age demonstrated complete cyst disappearance and at 6 months normal left ovarian tissue (Fig. 4). The right ovary and uterus were clearly normal. At present, the infant is clinically normal and healthy.

## DISCUSSION

During the last few years the number of cases of fetal ovarian cyst detected sonographically has progressively increased.<sup>1-7</sup> Autopsy data on stillbirths and neonatal deaths have shown a high frequency (34%) of small ovarian follicular cysts, which are thought to arise from hyperstimulation by placental chorionic gonadotropin and maternal hormones.<sup>8,9</sup> Spontaneous resolution of some uncomplicated neonatal cysts has also been reported.<sup>6,9,10,11</sup>

The sonographic differences between complicated and uncomplicated prenatal and postnatal cysts were described clearly by Nussbaum and coworkers.<sup>12</sup> The complicated cyst contains a fluid-debris level, a retracting clot, or septa with or without internal echoes, often with an echogenic wall. Alternatively, it can be solid. The noncomplicated cyst is anechoic and has an imperceptible wall. Recently, Sherer and colleagues<sup>13</sup>



**Figure 4** Longitudinal view through the bladder (bl) demonstrating what appears to be normal left ovary.

published a report of a case of prenatal cyst with fluid-debris level that proved to be adnexal torsion on laparotomy.

Our case was very suggestive of complicated ovarian cyst with complete involution. This would not neces-

sarily be adnexal torsion, and it could mean that perhaps not all these cases should invariably go to surgery.

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