20th World Congress in Fetal Medicine

A case of fetal ovarian cyst

Makni M, Tissaoui A, Abdelmoula G, Garci M, Mathlouthi N, Slimani O, Belghith S
Charles Nicolle Hospital, Tunis, Tunisia

Objective

The fetal ovarian cyst is a rare pathology, usually functional, which disappears postnatally. The prognosis of these ovarian cysts is burdened by a high rate of complications (adnexal torsion) which is why in-utero puncture of these cysts is advocated by some. The usual ultrasound criteria (female fetal sex, normal urinary and gastrointestinal tract) leave little room for differential diagnoses in the face of a thin-walled cystic image.

Methods

We report a case of fetal ovarian cyst diagnosed at 19 weeks gestation during a routine prenatal ultrasound scan.

Results

A 28 years old woman, nulliparous, with no previous medical history, who had an early ultrasound examination confirming a twin pregnancy. The ultrasound made at 19 weeks of gestation, concluded to a dichorionic diamniotic on-going twin pregnancy, with the presence of an anechoic image of 13.6 cm in diameter occupying all the abdomen of D1, compressing the heart, no digestive structures were visualized, a mild fetal hypotrophy was associated, without other anomalies. A puncture under ultrasound was performed, bringing back 770 cc of clear fluid, acellular according to cytology. An amniocentesis was performed for both twins, the cytogenetic analysis concluded to a 46XX karyotype. A second ultrasound performed at 24 WA revealed the recurrence of the cystic formation of 16.3 cm long axis occupying the whole abdomen, compressing the heart, the liver with pulmonary hypoplasia and a fetal biometry of 19 WA, the biometry of the 2nd twin was related to the term. A second puncture of the fetal ovarian cyst yielded 2.200 L of clear fluid, with a recurrence of the formation 15 days later associated with severe fetal hypotrophy for D1 and a biometry consistent with term for D2. Puncture of this cyst yielded 1.6 l of clear fluid. After consultation with the couple and in view of the frequent recurrence of the ovarian cyst, the severe fetal hypotrophy and the compression of the neighboring organs by the cyst, it was decided to carry out a selective fetal reduction on D1 by intracardiac KCl. The subsequent course of the pregnancy was normal.

Conclusion

In utero puncture seems to be an interesting approach in the management of an anechoic fetal ovarian cyst because of its low morbidity weighed against the important risk of torsion during the prenatal period. It must be carried out by a trained operator with the usual precautions taken for any intra-uterine procedure.