

Case Report

Subchorionic Placental Cysts and its Controversial Management

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Abstract

Subchorionic placental cysts are a relatively common finding in obstetrical sonographic evaluation, but they are usually single and the pregnancy outcome is almost always normal. This is a case report about a rare case of multiple and large subchorionic cysts associated to intrauterine growth restriction in third trimester, due to fetal constriction by the growing cysts. Pregnancy interruption was considered because of suspected pulmonary hypoplasia, but a healthy baby was born at 26th weeks.

Physicians must care that fetal evaluation in rare pathologies may not be accurate and, subsequently, any decision affecting pregnancy's future must be carefully discussed between pairs.

Keywords: Chorionic cysts, Membranous cysts, Subchorionic fibrin, Ultrasound follow-up, Growth restriction

Introduction

Etiology and incidence of these placental cysts are controversial [1,2] and there are also contradictory opinions about their clinical importance [1]. Some studies point to subchorionic fibrin deposition with central cyst formation has the leading cause of this pathology. When these cysts are formed, they are surrounded by a layer of fibrin and X cells (extravillous trophoblasts) [1]. Although these cases are also designated as subamniotic hematomas, some authors defend that this entity is different [3] and is caused by intraplacental haemorrhages in which blood is collected beneath the chorionic membrane, forming cysts bulging in to the amniotic cavity.

Most subchorionic cysts are thought to be obstetrically harmless [1,4-6]. However, in this case report, IUGR associated to enlargement of the cysts occurred. In a retrospective study, the frequency of IUGR (fetus < P10) occurred in 10% of cases, with strong association to size (> 4,5cm) and number (> 3) of the cysts [1].

Case Report

A 25-year-old nullipara with unremarkable family and personal history had regular prenatal evaluation since early gestation. First trimester combined screening at the 12th week was normal. However, multiple subchorionic placental cysts were diagnosed in the second trimester ultrasound, at the 22th week, although there were no morphological anomalies in the fetus and his growth was normal, in the 50th percentile. It was decided then that an ultrasound scan should be done each week. Subsequent scans showed deceleration of fetal growth with progressive enlargement of the cysts. At 24th weeks, the patient was admitted in nursery because of contractions and betamethasone was administered for fetal lung maturity, simultaneously with tocolysis. At the 26th weeks scan there were visualized 5 cystic anechoic masses protruding from the fetal surface of the placenta, the biggest with a diameter of 10 cm, occupying the

entire amniotic cavity (Figure1,2). IUGR was diagnosed (fetus in the 5th percentile) and pulmonary hypoplasia was suspected because of fetal compression and absent amniotic fluid. Fluxometry of umbilical artery was in the 90th percentile, suggesting high resistance to flow, but in the middle cerebral artery the fluxometry remained normal. Subsequently to this exam, pregnancy interruption was suggested and parents consented, after situation was properly explained. However, spontaneous vaginal delivery occurred on the same day. The newborn was morphologically normal, weighted 710g and the Apgar scores were 7 and 9 at one and five minutes, respectively. The placenta weighted 245gr and the length of the cord 18cm, with velamentous insertion, probably due to the large size and distention of the cysts surrounding the cord. Histological exam confirmed multiple cysts which walls consisted of amniotic and chorionic membranes.

The newborn was admitted in Neonatology Unit because of extreme prematurity, and the internment occurred without any complication. After 2 month, the child was discharged and is healthy.

Conclusions

This case suggests that regular follow-up is important to fetal evaluation and obstetric decision-making when placental cysts are present. IUGR is a possible complication [1,4,5], especially when placental cysts are multiple and large [1].

However, obstetrical ultrasound is more difficult and may not be accurate in this rare situation. Subsequently, physicians must be cautious about any precipitated obstetrical decision that can affect the possibility of delivery of a healthy newborn.

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Figure 1: Placental membranes forming an echogenic cysts that occupy the entire amniotic cavity.



Figure 2: Two cysts separated by a thick wall

Conflict of Interest

There are no conflicts of interest from any of the authors.

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Int Ginecolgia obstcia, 2016

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