

Research Letter

A large subchorionic placental cyst with thalassemia minor without fetal growth restriction

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Dear Editor,

We report a case of a large subchorionic placental cyst without fetal growth restriction.

A 33-year-old woman, G3, P2, presented with previous cesarean and a placental cyst, at 37 weeks gestation in labor for repeat cesarean delivery. Her past history revealed thalassemia minor and previous one cesarean (the second, due to breech presentation). The prenatal course had been normal and uneventful but a placental cyst, 5 × 8 cm, which was found incidentally at 28 weeks gestation by means of an abdominal ultrasonography (Fig. 1A). Doppler study was normal and fetal surveillance of serial regular prenatal follow-up visits was normal. Physically, the patient was healthy and apparently normally pregnant at near term with no evidence of fetal growth restriction. Hemogram showed Hb 10.1 g/dL, MCV 70.4 fl. A live normal female infant, 2950 gm, was borne smoothly by cesarean. The placenta weighed 800 gm, with a cyst 9 cm, containing watery fluid, in the center of the placenta near the cord insertion. The umbilical cord was normal with three vessels. Grossly, some blood clots and fibrin deposits were found within the cyst, between the fetal surface of the placenta and maternal portion of the placenta (Fig. 1B). Microscopically, focal separation of the amnion and chorion was found. The cyst was surrounded by intermediate trophoblasts (X-cells) and fibrin, while focally there was infarction of chorionic villi and dystrophic calcification. The cyst

wall composed of amnion, chorion, intermediate trophoblasts and fibrin strands (Fig. 1C).

A variety of placental cysts may present, and the most common subchorionic cysts are usually smaller than 2 cm in diameter and innocuous. They tend to occur more frequently with maternal diabetes mellitus or rhesus incompatibility. When the cyst is arising from and being attached near the umbilical cord insertion, the risk of umbilical cord constriction is increased; therefore, this may cause fetal growth retardation [1]. Our patient had a large cyst near the umbilical cord insertion but no fetal growth restriction. Cystic masses arising from the fetal surface of the placenta have been referred to by many different terms, including “subchorionic cysts,” “chorionic cysts,” “membranous cysts,” and “subamniotic hematomas” [2]. Though, the term “subamniotic hematoma” appears to be used to describe a different lesion [3]. On a review of 34 cases of placental surface cysts, all were related to subchorionic fibrin with central cyst formation. Cysts larger than 4.5 cm, or more than 3 in number were more frequently associated with intrauterine growth restriction [2]. The authors suggested that these cysts developed in an area of subchorionic fibrin deposition. Perhaps related to X cells in or at the edge of the fibrin, cystic change occurs, and the chorion becomes thinned by the cyst and balloons outward along with the amnion [2]. A woman with a large subchorionic cyst, 10 cm in size, was reported complicated with an intracystic hematoma delivered by cesarean without any other complication [4]. But, massive subchorionic thrombohematoma generally was associated with poor prognosis [5].

In conclusion, surface cystic masses around the placenta such as subchorionic cysts, should be included in a differential diagnosis for cystic lesions identified in pregnancy, and to evaluate if any complications occur when a large subchorionic cyst arising from near the cord insertion.

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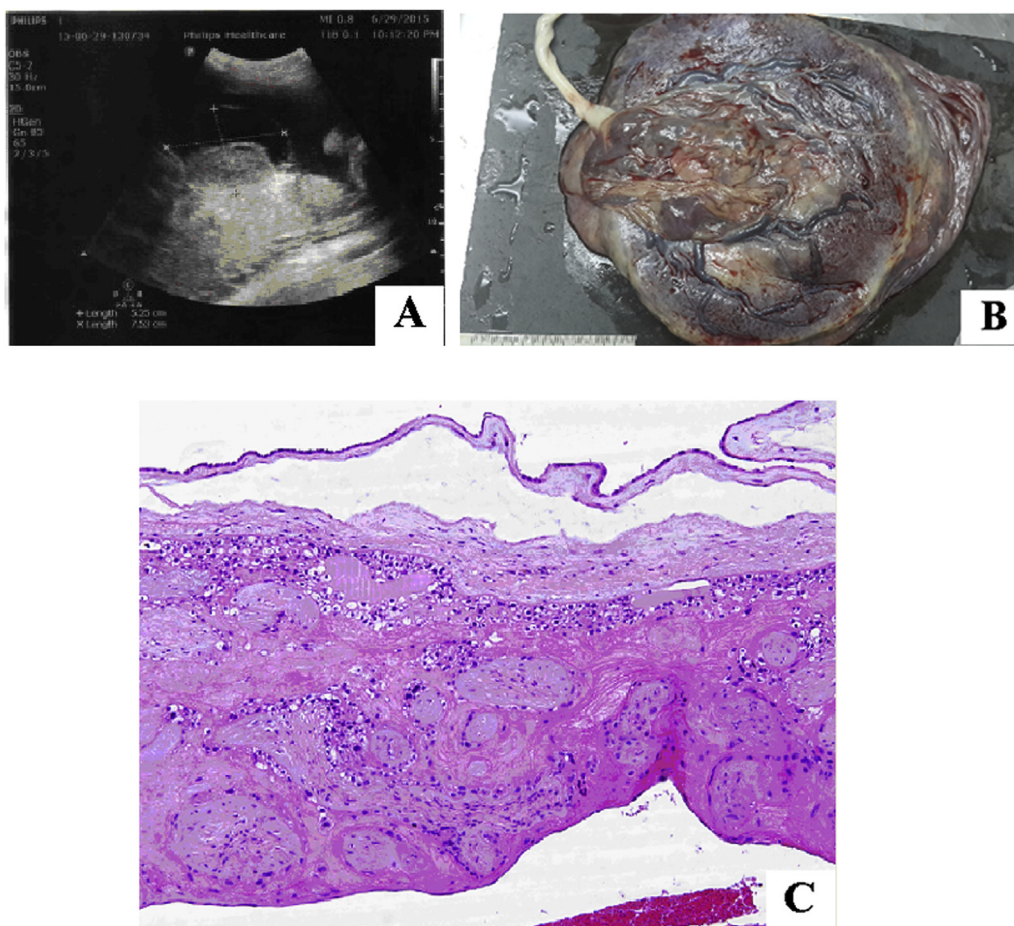


Fig. 1. A. An abdominal ultrasonography at 28 weeks gestation showing a cystic lesion near the placenta. B. Grossly, the collapsed placental cyst near the umbilical cord insertion at the time after cesarean delivery. C. Microscopically, from top downward, section of the cyst wall composing of amnion, chorion, intermediate trophoblasts and fibrin strands. (H&E, 400x).

Declaration of conflicting interests

The authors declared no potential conflicts of interest for this article.

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