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Case Report

Giant Placental Chorioangioma Causing a Double Bubble in Diabetic Mother: Case Report

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Abstract

Chorangioma is a nontrophoblastic benign placenta tumor. It can be characterized by its size clinically; Many pregnancies are accompanied by small chorangioma; however, large chorangioma happens rarely (1:50,000), and it is more likely to occur in women over 30, first pregnancies, and diabetics. A 40-year-old diabetic mother, second gravida with a history of one abortion, was admitted to the hospital due to polyhydramnios. At the 19th week of gestation, we observed multilocular cystic at the edge of the placenta measuring 33*39 according to color doppler imaging. Also, we saw the fetal stomach a little prominent with a double bubble. Sonography done in the 25th week revealed a slight polyhydramnios. The stomach was entirely prominent with a double bubble. An avascular multilocular cystic at the superior edge of the placenta measured 48*63 mm; at the 35th week of gestation, an avascular solid cystic area measuring 69*78 with bulging to the amnion confirmed the placental chorioangioma on the 39th week's patients underwent cesarian section. The placenta was fundal. The fetus and placenta weighed 3618g, which we had a healthy 3100g healthy boy, and a multilocular cystic weighing 518g binded to the placenta.

Keywords: *Giant Placental Chorioangioma; Causing a Double Bubble; Diabetic Mother: Case Report*

Introduction

Chorangioma, a Nontrophoblastic benign vascular tumor of the placenta, can be characterized by its size clinically [1]. Small chorangiomas are more common, with a frequency of approximately 1%. Large chorangioma (more than 5 cm in diameter) happens rarely from 1:9,000 to 1:50,000, and it may be associated with some pregnancy complications [2]. The probability of its occurrence is different depending on the age, primary disease, etc. it is usually more likely to occur in women over 30 years old, first pregnancies, twin pregnancies, and diabetics [1]. To diagnose the chorangioma before parturition, ultrasonography is suggested. Especially larger tumors that lead to clinical complications [3]. In this case, we represent A 40-year-old second gravida having a chorangioma tumor measuring 31 X 35 mm, 69*78 mm with signs of polyhydramnios at the 19th and 35th week of gestation. This is a rare case due to showing double bubble, size, and development.

Case Presentation

A 40-year-old diabetic mother, second gravida with a history of one abortion, was admitted to the hospital due to polyhydramnios. We had a normal fetus based on sonograms of the 12th and 18th week of gestation. But an avascular solid cystic measuring 31*35 mm in the anterior view of the placenta, which was prominent in the amniotic fluid, indicated a placental chorioangioma.

At the 19th week of gestation, we observed multilocular cystic at the edge of the placenta measuring 33*39 according to color doppler imaging. Also, we saw the fetal stomach a little prominent with a double bubble. She was told to have follow-up sonography after one month. Sonography done in the 25th week revealed a slight polyhydramnios. The stomach was entirely prominent with a double bubble. An avascular multilocular cystic at the superior edge of the placenta measured 48*63 mm. MRI was recommended to check chorioangioma. MRI was performed three days later, and it showed a solid cystic measuring 48*50 mm at the anterosuperior surface of the placenta. At the 35th week of gestation, an avascular solid cystic area measuring 69*78 with bulging to the amnion confirmed the placental chorioangioma. Based on the following week's sonogram, we had a transverse and 34+5 fetus; the placenta was posterior fundal, AF was 24 cm, the BPP score was 8/8, the fetus weighed 3058g, and observed the multicystic area measured 66*88 in the superior view of the placenta.

PMH

- Th first-trimester screening was regular. But we got suspicious in the second-trimester screening, and we recommended the patient have an amniocentesis test, but she refused.
- The trace MR of the echocardiography of the mother was 55 percent. The echocardiography of the fetus was normal.

The mother was admitted to the hospital in the 35th and 36th weeks because of polyhydramnios and placenta abnormality. We injected two doses of betamethasone during hospitalization, and collecting urine for 24 hours was accomplished, which was 51/2150. We controlled blood sugar levels with NPH and regular insulin.

Allergy history was none. Her drug history shows that she used iron, folic acid, insulin, and multivitamin tablets. They had to do D and C surgery to clear the uterine lining from any tissue left after her last year's abortion.

Actions are taken in the last week of gestation

- Full pregnancy sonography revealed a 39-week fetus. The placenta was fundal, and AF was 22 cm. fetus and placenta weighed 3618g.
- Collecting urine for 24 hours showed 110/1750. Also, the blood pressure was under control.
- Based on perinatal consultation, we candidate the mother for cesarean section because of High fetus weight and improper pelvic and placenta disorder.
- Because of ALF, we checked the sonogram of the liver, but it was normal.
- Eventually, we had a baby boy weighing 3100g and a meconium-stained AF.

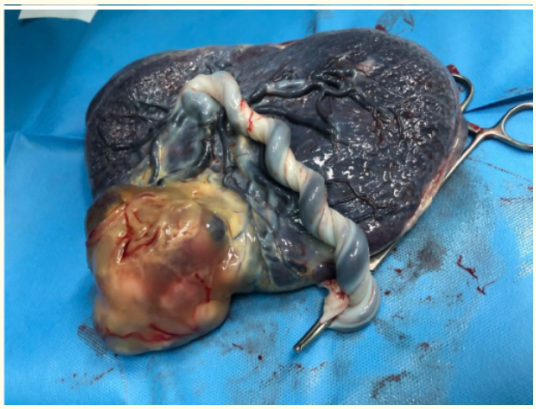

Figure 1: *A multilocular cystic weighing 518g is binding to the placenta. The macroscopic examination displays the yellowness of this chorioangioma. After the incision, we witness the numerous cysts that stick together with the amnion fluid.*

Discussion

Chorangioma, a benign placenta tumor, usually doesn't thread the mother or fetus either. Many pregnancies are accompanied by small chorangioma and don't make any clinical problems. However, large chorangiomas can be associated with some complications such as polyhydramnios, maternal preeclampsia, fetal anemia, fetal growth restriction, etc [4].

As we pointed out, in this case, polyhydramnios was reported. different mechanisms can explain the reported polyhydramnios caused by chorangioma. First of all, it is anticipated that the proximity of placental chorangioma to the umbilical cord and the mechanical pressure of the tumor could cause the obstruction of the umbilical vein and lead to polyhydramnios. Furthermore, the polyhydramnios can be the result of transudate, which transmit from the abnormal vessel wall of the placental chorangioma.

One of the possible risk factors related to chorangioma can be gestation diabetes. It has been estimated that chorangioma can be associated with maternal diabetes [1]. But one study by Ogino., *et al*. [5] couldn't show any relationship between chorangioma and maternal diabetes. But some case reports related to chorangioma reported a maternal diabetes [6,7]. More studies regarding the relationship between maternal diabetes and chorangioma are needed.

The size of chorangioma, can be regarded as an important factor that cause different complications. As this case's unique symptom, we can point to a double bubble. The double bubble can imply either duodenal atresia, duodenal web, annular pancreas, and also midgut volvulus [8-10]. we speculated that the reported double bubble can cause excess mechanical pressure of the placental chorangioma. Furthermore, the large size of chorangioma may cause some blood-related complications. Some studies have reported that chorangioma may cause fetal growth restriction due to fetal hypoxia and reduced perfusion of chorionic villi [11-13]. So, the number of nutrients and oxygen within the placenta can change and affect the fetus.

Even though most placental chorangioma doesn't make complications, in rare cases, such as our reported case, the patient with a large placental chorangioma should follow up for possible fetal and natal complications because the large size of the tumor may affect the fetus.

Regarding the risk of large sizes chorangioma for the fetus [14], in future research, firstly we suggest the studies should lead to find drugs or treatments to prevent the tumor from getting bigger, and by monitoring mother we can see the effectiveness of drugs. with

controlling the tumor from getting bigger, the important risk of mechanical pressure and polyhydramnios, which can lead to fetal demise [15,16], will be less for the fetus. Secondly, our case, like most of the cases of chorangioma, had diabetes, and according to the connection between diabetes and chorangioma [17], we can monitor the mothers with diabetes every month to examine the probable chorangioma. By controlling and observing the mothers with diabetes, we will be able to detect chorangioma cases and control the possible symptoms it may cause.

Conclusion

Chorangioma, a benign placenta tumor, usually doesn't thread the mother or fetus either. However, large chorangiomas can be associated with some complications, it is more likely to occur in women over 30, first pregnancies, and diabetics. We report a 40-year-old diabetic mother, second gravida with a history of one abortion, at the 35th week of gestation, an avascular solid cystic area measuring 69*78, in this case, polyhydramnios was seen also As this case's unique symptom, we can point to a double bubble. The double bubble can imply either duodenal atresia, duodenal web, annular pancreas, and also midgut volvulus, we speculated that the reported double bubble can cause excess mechanical pressure of the placental chorangioma, on the 39th week's patients underwent cesarian section we had a healthy 3100 g healthy boy, and a multilocular cystic weighing 518g binded to the placenta.

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Conflict of Interest

The authors declared no conflict of interest.

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