

Case Reports

Chorangioma of the Placenta with Hydrops Fetalis

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Hydrops fetalis is commonly associated with an immune hemolytic anemia, in particular erythroblastosis fetalis. The numerous non immune causes tend to be underdiagnosed even after a complete medical autopsy(1). We report a patient with chorangioma of the placenta presenting with hydrops fetalis.

Case Report

A full-term male neonate weighing 2.5 kg was delivered by spontaneous vaginal delivery to an unbooked primigravida. The blood group of the mother was AB — and the father 0+. The indirect Coomb's test was negative. There was no history of consanguinity. There was severe asphyxia at birth, Apgar score at 1 minute being 1/10. There was generalized edema, pallor and peripheral cyanosis. The heart rate was 10 beats per minute. There was no spontaneous respiration. Despite intensive resuscitative measures the newborn could not be revived and expired 20 minutes after birth.

Investigations showed hemoglobin level of 10.8 g/dl, blood group was B-, bilirubin 3.5 mg/dl and the direct Coomb's test was negative. The peripheral blood smear

showed marked anisocytosis and poikilocytosis with presence of microspherocytes and numerous normoblasts, suggesting a hemolytic anemia.

Autopsy showed cardiomegaly, hepatomegaly and fluid in the pleural, pericardial and peritoneal cavities. On microscopy there was extramedullary hematopoiesis in the liver, spleen and kidney. The placenta was large and bulky, weighing 1.2 kg with a diameter of 24 cm and thickness 4 cm. On serial sectioning of the placenta multiple well defined greyish blue, spherical to ovoid nodules of spongy consistency were found. Some were seen as bulging protuberances on the fetal surface of the placenta, the sizes ranging from 4-7 cm. Microscopic examination (Fig. 2) of these nodules showed a well differentiated network of proliferating capillaries supported by a loose mesh of fibrous tissue and chorionic stromal cells. This picture was considered characteristic of the benign placental tumor chorangioma.

Discussion

The clinical significance of placental chorangiomas is related to the size of the tumor. Those larger than 5 cm may be associated with hydramnios, hemorrhage,

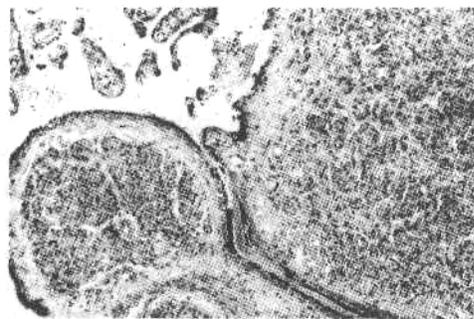


Fig. 1. Photomicrograph showing chorangioma composed of proliferating capillaries, fibrous tissue and chorionic stromal cells. Normal placental villi are also seen (H&E \times 125).

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premature delivery, premature placental separation and placenta previa. They may also lead to non-immune hydropsfetalis(1,3). There is no apparent relationship to toxemia of pregnancy(3). Intrauterine or neonatal death is due to severe fetal distress caused by left to right shunting of blood across the tumor, the tumor acting as a physiological dead space returning to the fetus oxygen depleted blood(4). An associated feature may be a microangiopathic hemolytic anemia cause by mechanical injury to the fetal red cells as they traverse the labyrinthine newly formed, deformed vascular channels(5). This was probably the cause of hemolytic anemia in the present case.

An antenatal diagnosis of placental chorangioma, especially those large enough to be of clinical significance is possible by ultrasonography(6). Pediatricians need to be aware of this condition so that an early diagnosis is made. The treatment after birth being

essentially supportive

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NOTES AND NEWS

FOURTH ANNUAL CONFERENCE OF THE NNF KERALA CHAPTER 1996

This event will be held on 15th September, 1996 at Kottayam at Hotel Aida. The last date for registration is 15.8.1996. For further details please contact Dr. P. Sudevan, Professor and Head of the Department of Pediatrics, Chairman, Organizing Committee, Institute of Child Health, Kottayam 686 036. Phone: 0481-570620 or Dr. L. Rajam, Associate Professor of Pediatrics, Secretary, Organizing Committee, Institute Of Child Health, Kottayam 686 036. Phone: 597508.

XVII ANNUAL CONFERENCE OF IAP A.P. STATE BRANCH

This event is to be held in the Rangaraya Medical College, Kakinada, AP on the 7th and 8th December, 1996. The registration fee is Rs. 350/- (for PGs and accompanying person Rs. 200/-). A one day PALS course is being planned on 9th December 1996. For further details please contact; Dr. V. Vikram Kumar, Organizing Secretary, AP PEDICON 96, Department of Pediatrics, G.G.H. Kakinada 533 008, AP. Tel: 0884-71513 and 61513.