

## **Non-immune hydrops**

Kratochvílová T. , Durdová V. , Maděrková Tozzi M. , Ľubušík M.

Department of Obstetrics and Gynecology, Palacky University Hospital, Olomouc, Olomouc, Czechia

### **Objective**

Fetal hydrops is characterized by the presence of fluid in at least two body cavities (ascites, pleural effusions, and / or pericardial effusions) often associated with cutaneous edema. The prevalence is reported as 1 in 2000 births. Only 10 % of hydrops are immune due to hemolytic disease of the fetus caused by alloantibodies, 90 % of hydrops are so-called non-immune hydrops. The etiology of nonimmune hydrops includes cardiovascular abnormalities (structural defects, arrhythmias), chromosomal abnormalities, birth defects, congenital infections, metabolic diseases, placental tumors. This is a serious condition with a high perinatal mortality reported between 70-90%. Approximately 50 % of fetuses die in the uterus and 50 % do not survive the neonatal period if hydrops persist.

### **Methods**

Case report.

### **Results**

The pregnant woman was referred to the Center for Fetal Medicine for a examination at 34<sup>+0</sup> week of gestation. The fetus was diagnosed with sudden hydrops and polyhydramnios, skin edema. Consultation with a neonatologist, pediatric cardiologist and clinical psychologist was provided, followed by induction of fetal lung maturity with corticosteroids and laboratory tests, including examinations for congenital infections. Erythrocyte alloimmunization and fetomaternal hemorrhage (FMH 1.23ml) were excluded from the results of the examination in pregnant women as the cause of hydrops, preeclampsia was also excluded, herpes simplex virus virus infection was diagnosed, and antiviral infection treatment was performed. In the 35 + 1 weeks of gestation there is a regression of effusion in the third area, ruled out right heart failure, iatrogenic preterm birth not indicated. At the 36 weeks of gestation the abnormal ultrasound finding in the fetus was no longer present. In the 41<sup>+3</sup> weeks of gestation induced vaginal delivery indications post-pregnancy pregnancy, born live girl, birth weight 3200 g without signs of hydrops, the 3<sup>rd</sup> day of life released in good condition with mom home.

### **Conclusion**

Fetal hydrops is a serious condition with high perinatal morbidity and mortality, despite extensive investigations of the etiology of hydrops in about 18% remains unexplained. Intrauterine infection is the cause of hydrops in 7% of cases. Ultrasound plays a crucial role in the care of pregnant women and a multidisciplinary approach is needed. In our case was a regression of hydrops in utero.