

Neonatal diagnoses of congenital herpes virus infection case report

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Congenital infections with herpes simplex virus (HSV) are very rare, even in primary infection in pregnancy. However, HSV can cause severe neonatal malformations.

Objectives: We report a case of transplacental intrauterine HSV infection.

Healthy 42-year-old woman, G4P4.
Blood type 0 Rh positive.

Admitted at 24 weeks of gestation with a suspected premature rupture of membranes.
Obstetric history included 3 cesarean sections.

Pregnancy surveillance: blood tests performed were negative for rubeola, syphilis, HIV, hepatitis B, toxoplasmosis and cytomegalovirus. First and second trimester ultrasounds revealed no malformations.

Due to the suspicion of RPM, she was hospitalized for fetal lung maturation, tocolysis, and prophylactic antibiotic therapy.

At admission:

Obstetric ultrasound:

- ❖ Cortex asymmetry (A);
- ❖ Polymicrogyria (A);
- ❖ Ventriculomegaly (B);
- ❖ Anasarca;
- ❖ Cardiomegaly (C);
- ❖ Hepatomegaly with intrahepatic calcifications (D);
- ❖ Fetal growth restriction.



Amniocentesis was performed with negative results for infections (parvovirus, toxoplasmosis, cytomegalovirus and zika).

Given the fetal alterations, the poor prognosis was explained. The couple decided to maintain the pregnancy.

At 31 weeks of gestation, the pregnant started spontaneous labor and cesarian was performed due to fetal growth restriction.

A female newborn was delivered with 1130g, APGAR score of 8/10/10, and was admitted to neonatology.

On the fifth day of life, a vesicular rash emerged, suggestive of HSV, and acyclovir therapy was initiated.

Blood PCR for HSV was performed, and vesicle swabs tested positive for HSV-1 and HSV-2.

Despite the hemodynamic support, the newborn died on the sixth day of life.

Conclusions: Prenatal ultrasound abnormalities related to HSV are rare and nonspecific. In the present clinical case, although amniocentesis was performed to search for an infectious cause, HSV was not investigated. This infection is often asymptomatic in pregnant women, which is why this should not be ruled out, even if there is no medical history or signs and symptoms, due to its potentially devastating effect on the fetus or newborn.