

Perinatal varicella

Varicela perinatal

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Figure 1. Ulcerative and cicatricial lesions, and bridles of congenital varicella

In 1947, LaForet and Lynch first described the association between maternal infection by *Varicella-zoster* virus during the beginning of gestation and congenital anomalies in the newborn⁽¹⁾.

Today varicella during pregnancy is a very rare condition. Primary infection by varicella during gestation is estimated to affect one to seven per 10 thousand pregnant women⁽²⁾.

The *Varicella-zoster* virus is transmitted to the fetus mainly through the placenta, as a result of viremia promoted by primoinfection or viral reactivation. The risk of maternal-fetal transmission ranges from 0.5 to 6.5%⁽³⁾.

Varicella is considered a congenital syndrome when the pregnant woman is infected between zero and 20 weeks of gestation. Perinatal varicella occurs in newborns up to 10 days after birth⁽³⁻⁶⁾.

The congenital varicella syndrome is characterized by embryofetopathy, including cicatricial lesions on the skin, limb hypoplasia, muscle atrophy, clubfoot, intrauterine growth restriction, microcephalus, cerebellar and cortical

atrophy, hydrocephalus, convulsions, intracranial and extracranial calcifications, sensory deficit, Horner syndrome, spinal cord atrophy, anal sphincter dysfunction, dysphagia, intestinal atresia, neurogenic bladder, renal dysfunction, recurrent aspiration pneumonia, microphthalmos, optic nerve atrophy, optic disc hypoplasia, chorioretinitis, congenital cataract and nystagmus⁽³⁾.

The presentation of perinatal varicella varies according to maternal involvement: if it occurs from six to 21 days before delivery, the newborn condition will be mild, but between less than 5 days before and 2 days after delivery, 25 to 50% of newborns may be affected and the neonatal disease will be extremely severe. The symptoms arise between 5 and 10 days of life, including fever, skin lesions, and the neonates might present difficult breathing and cyanosis due to pneumonia, or disseminated necrotic lesions in the organs, which lead to death^(3,7).

The diagnosis of perinatal varicella is made through epidemiological data, that is, a mother presenting

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a typical scenario of varicella before delivery and newborn with a characteristic clinical picture, ranging from presence of some vesicular, ulcerated and cicatricial lesions (Figure 1) or generalized skin rash in a newborn with general status not much affected, to a severe generalized disease⁽⁶⁻⁷⁾. Laboratory tests include immunoenzyme assay (IEA), latex agglutination (LA), indirect immunofluorescence (IIF) and culture of vesicular fluid. Serology (IgG and IgM) for congenital varicella may be positive at birth or not⁽⁷⁾.

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