

# Perinatal varicella

Anca Chiriac<sup>1,2,3</sup>, Piotr Brzezinski<sup>4</sup>, Adina Coroaba<sup>1,5</sup>, Meda Bradeanu<sup>6</sup>, Vlad Gorduza<sup>7</sup>

<sup>1</sup>Centre of Advanced Research in Bionanoconjugates and Biopolymers, "Petru Poni" Institute of Macromolecular Chemistry of Romanian Academy, <sup>2</sup>Dermato-Physiology Department, Apollonia University Iasi, Iasi, Romania, <sup>3</sup>Department of Dermatology, Nicolina Medical Center, Iasi, Romania, <sup>4</sup>Department of Dermatology, <sup>6</sup>th Military Support Unit, Ustka, Poland, <sup>5</sup>The East European Network of Excellence for Research and Development in Chronic Diseases CHRONEX-RD, "Grigore T. Popa" University of Medicine and Pharmacy Iasi, Romania, <sup>6</sup>Department of Neonatology, "Elena Doamna" Obstetrics Hospital, Iasi, Romania, <sup>7</sup>"Grigore T. Popa" University of Medicine and Pharmacy Iasi, Romania

**Corresponding author:** Adina Coroaba, PhD student, E-mail: adina.coroaba@icmpp.ro

Sir,

Neonatal varicella infection has been rarely reported since vaccine introduction. Neonatal varicella occurs in the first 28 days of life and is due to infection developed by mother during last 5-7 days of delivery and 5-7 days post delivery or in case of similar infection acquired by other siblings [1,2].

Neonatal varicella should be differentiated from "fetal varicella syndrome, congenital varicella with high morbidity and mortality.

Rapid and accurate diagnosis is of great importance on therapy and prognosis.

Two cases of neonatal varicella treated with systemic acyclovir are presented.

**Case 1:** A 28-day old female patient was seen in Dermatology Hospital for vesicular rash distributed on the limbs and trunk, few vesicles were scattered mostly on the superior part of the body (Fig. 1).

No systemic symptoms, usual lab analysis within normal limits for the age. Tzanck smear showed multinucleate giant cells, history of recent chicken pox in older brother was admitted by the mother, and serology confirmed the diagnosis of neonatal varicella.

Good response and complete recovery was achieved under systemic administration of acyclovir 20mg/kg iv 8 hourly for 10 days.

**Case 2:** A 17-day old male premature born baby was referred to Dermatology Unit for vesicular lesions



**Figure 1:** Vesicle on the left foot.



**Figure 2:** Crops of vesicles on the trunk.

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spread on the limbs, trunk and scalp accompanied by high fever (Fig. 2). His mother was treated for varicella one week before admittance to the hospital, meaning approximately 10 days after delivery.

Based on clinical aspect of the lesions, close contact with mother infected with varicella 10 days postpartum, the presence of typical multinucleate giant cells on Tzanck smear a diagnosis of neonatal varicella was admitted and a treatment with acyclovir iv was started. Serology was negative. For the following 14 days the baby boy has received acyclovir 20 mg/kg 8 hourly with good response and no complications. A close follow-up was recommended.

## DISCUSSION

If maternal infection occurs during 8–20 weeks of pregnancy fetus has a risk of developing varicella embryopathy known as “fetal varicella syndrome” characterized by ophthalmological, muscle and skeletal anomalies, mental retardation, microcephaly, urological defects [3,4].

Congenital varicella occurs if the mother got the infection at 13-20 weeks gestation and presents in new borns with skin scars, growth retardation, limb defects, chorioretinitis, neurological involvement [1]. The prognosis is poor, mortality high, around 30% [2].

When the maternal infection occurs after 20 weeks of gestation some reports highlighted an increased risk of herpes zoster during childhood [5].

Neonatal varicella occurs in the first 28 days of life and is due to infection developed by mother during last 5- 7 days of delivery and 5- 7 days post delivery or in case of similar infection acquired by other siblings [3,4].

Two types of neonatal varicella exist: if the mother has been infected less than 5 days before birth or 2 days after delivery, varicella-associated antibodies are not transmitted to the newborn and the infection is severe; if the mother has got the infection more than 5 days prior to birth, antibodies have been transmitted to the child causing a less severe form of the disease [2].

It is of outmost importance to consider the moment of varicella virus infection that will guide the therapeutical approach.

Maternal treatment includes oral acyclovir within 24 h of onset [6].

If maternal infection occurs 5-7 days before delivery or 2 days after giving birth a prophylactic approach to the child is mandatory using varicella zoster immunoglobulin or intravenous acyclovir, if immunoglobulin therapy is not available or the diagnosis was made 96 hours after exposure [6].

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