

Parvovirus B19 during pregnancy: case series from a tertiary centre in northern Italy

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Objective. Parvovirus B19 infection may affect 1-5% of pregnant women and vertical transmission occurs in 30-50% of cases of maternal infection. In most cases infected foetuses do not show abnormalities, but in severe cases foetal anaemia, hydrops, and even pregnancy loss can occur. The aim of the study is to describe cases of Parvovirus B19 infection during pregnancy and to analyse foetal and maternal outcomes.

Materials and Methods. An observational study including all cases of Parvovirus B19 infection, from January to September 2024, in women who delivered at Department of Obstetrics of University Hospital Maggiore della Carità, Novara, was conducted.

Gestational age at the time of infection, maternal symptoms and neonatal outcomes were assessed. Pregnancy and delivery outcomes were recorded.

Results. Nine women contracted Parvovirus B19 during pregnancy. The average gestational age at the time of infection was 24 weeks. Five women were infected during 2nd trimester (55.5%) and 4 women during 3rd trimester (44.4%). Maternal symptoms involved 33.3% of women (arthralgias, skin rashes). Only one foetus (11.1%) developed hydrops and anaemia, which resolved within a week without need for foetal intervention. In one case (11.1%), foetal growth restriction was found and admission to Neonatal Pathology Unit was required.

Conclusions. A higher incidence of foetal and neonatal complications was observed in case of maternal symptoms. The most significant foetal complication was associated with the earliest contracted infection. Offering screening to women could be recommended in months with higher incidence of Parvovirus and for at-risk groups in order to identify infection early.