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## CASE REPORT

# Transient Non Immune Hydrops Foetalis

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### ABSTRACT

Nonimmune hydrops which is secondary to parvovirus B-19 can manifest itself in various forms. It can manifest as severely as foetal death to as mild as spontaneous resolution without any sequelae. We present here, a rare case of nonimmune hydrops which resolved spontaneously in a span of 5-6 weeks.

**Key Words:** Nonimmune hydrops, Parvovirus B-19 infection, Spontaneous resolution

**Key Message:** Infant follow up is mandatory in view of the risk of congenital red blood cell aplasia.

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### Introducton

Nonimmune hydrops is a non-specific finding in a wide variety of disorders characterized by extensive accumulation of fluid in the foetal tissue or body cavities without any identifiable circulating antibody against the RBC antigen. It is being identified much more frequently ever since high resolution sonography has become universally available. Parvovirus is the most common infectious cause of NIH in autopsied foetuses[1]. Foetal infection develops in 25 to 33% of the cases, but hydrops develops only in 1% of the infected women and is confined to the infection in the first 20 weeks of gestation [2]. Hydrops occurs due to prolonged hypoplastic anaemia .

### Case Report

A 26 year old woman who was married for 3 years and who was a known case of PCOD, conceived after infertility treatment. Her pregnancy progressed uneventfully till 32 weeks. Scans at 6 weeks, 5 days and 24 weeks were normal. At 32 weeks, the scan showed the evidence of foetal ascities and bilateral pleural effusion, with a moderate degree of hydramnios [Table/fig 1](**Fig.1**). The scan which was repeated after 3 weeks showed minimal foetal ascities with hydramnios. The scan which was repeated again after 2 weeks, showed hydramnios with mild IUGR but no ascities or pleural effusion. Routine investigations were normal. The blood group being B+ve, serological tests and investigations for torch infections were -ve but were +ve for parvovirus B-19 infection. The patient underwent LSCS at term for these obstetric indications and delivered a live healthy female baby weighing 3 kg. Now the child is 4 years and 6 months old and is being followed up regularly, with no abnormality detected.



(Table/Fig 1) Scan report confirming hydrops at 31weeks 4days.

## Discussion

More than 80% of the hydrops cases were found in the second trimester, with a mean gestational age of 22-23 weeks in cases of paravovirus infection. 33% of the hydrops resolve themselves without treatment. Foetal death is rare. There is no reliable predictor for foetal death or for the resolution of the hydrops [3]. In our case, hydrops was detected in the third trimester, the earlier scan at 24 weeks being normal. Ascities and pleural effusion gradually disappeared and was confirmed by serial scanning. So, no treatment was offered. Boris M et al and Theresa et al described cases of the spontaneous resolution of hydrops foetalis which was secondary to parvovirus infection [4],[5]. Similarly, Ali H.S. et al described the spontaneous resolution of a case of idiopathic non-immune hydrops foetalis[6].

Infant follow up is mandatory in view of the risk of congenital red blood cell aplasia [7]. Most of the fetuses have normal long term

development [8],[9]. Three cases of persistent neurological morbidities and three cases of persistent infection with anaemia have been reported, following foetal infection [10]. Two of these children died in the neonatal period, and these cases should be taken into account when counseling parents about the short and long term prognosis following intrauterine parvovirus infection [11].

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