

REVIEWER'S REPORT

Manuscript No.: IJAR-52292

Date: 16/06/2025

Title: Non-Immune Hydrops Fetalis Secondary to Parvovirus B19 Infection with Favorable Perinatal Outcome: Case Report and Review of the Literature

Recommendation:

- ✓ Accept as it is
- Accept after minor revision.....
- Accept after major revision
- Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality		✓		
Techn. Quality		✓		
Clarity		✓		
Significance	✓			

Reviewer Name: Dr. S. K. Nath

Date: 17/06/2025

Reviewer's Comment for Publication:

The paper effectively illustrates that parvovirus B19 can cause severe fetal anemia leading to hydrops fetalis, but with prompt diagnosis and intrauterine transfusions, favorable perinatal outcomes are achievable. It underscores the importance of fetal surveillance using ultrasound and Doppler studies in pregnant women with suspected or confirmed infection. While limited by its case report nature, this study adds valuable clinical insights and highlights the need for timely intervention. Future research should focus on larger cohorts, long-term fetal outcomes, and preventive strategies, including vaccine development and screening programs.

Reviewer's Comment / Report

Strengths

- Comprehensive Case Presentation:** The paper provides an in-depth clinical case with detailed ultrasound findings, serologic results, intervention procedures, and follow-up data, offering valuable insights into managing similar cases.
- Literature Review:** It contextualizes the case within the broader spectrum of parvovirus B19-related fetal complications, discussing the pathogenesis, diagnosis, and treatment options with references.
- Clear Diagnostic and Therapeutic Framework:** The report emphasizes the importance of ultrasound (e.g., MCA Doppler) and serology in diagnosis, as well as the effectiveness of intrauterine transfusions in treating fetal anemia caused by parvovirus.
- Positive Outcome Highlighted:** Demonstrating that timely intervention can lead to favorable neonatal outcomes adds to clinical knowledge and encourages proactive management.

Weaknesses

- Limited Sample Size:** As a single case report, findings cannot be generalized. The paper lacks a broader cohort or statistical analysis, limiting its applicability.
- Incompleteness of Long-term Follow-up:** The follow-up duration was only six months. Long-term neurodevelopmental outcomes remain unaddressed, which are critical when evaluating intrauterine transfusions.
- Literature Review Scope:** While informative, the review could have been more systematic, including more recent studies or meta-analyses to enhance comprehensiveness.
- Limited Discussion on Prevention:** The paper briefly mentions the absence of a vaccine and preventive measures but does not elaborate on specific strategies for at-risk populations.