VACCIREVIEW

Congenital measles A case highlighting challenges in clinical interventions in a developing country

Bibliography

Koumba Maniaga R, Bang Ntamack JA, Mintsa-Mi-Nkama E, et al. Congenital measles: A case highlighting challenges in clinical interventions in a developing country. *Int J Infect Dis.* 2026;163:108215. doi:10.1016/j.ijid.2025.108215.

Critical Opinion

This case report is a stark reminder that congenital measles—once nearly eradicated—remains a preventable tragedy in regions where immunization systems falter. The authors effectively demonstrate how a chain of structural deficits—low maternal vaccination, absent antenatal care, diagnostic scarcity, and lack of immunoglobulin availability—transformed a manageable public health failure into a fatal neonatal emergency. The article underscores that measles elimination is not merely a biomedical challenge but a societal one.

Summary

This case report documents a rare but severe instance of congenital measles in Libreville, Gabon, emphasizing the interplay between low vaccine coverage, diagnostic limitations, and therapeutic scarcity in resource limited settings. The authors present the clinical course of a preterm infant born to an unvaccinated young mother during an ongoing measles epidemic, offering a compelling illustration of how systemic gaps compound individual vulnerability.

The article opens by establishing measles as an exceptionally contagious viral disease with significant morbidity in unvaccinated populations. The background section situates the case within the shifting epidemiology of measles: although traditionally a childhood infection, declining vaccine coverage in many regions has expanded susceptibility to adults, including pregnant women—an especially high risk group. In Gabon, recurrent outbreaks since 2013 reflect persistent immunization gaps, making congenital measles once again a relevant clinical concern.

The reported newborn was delivered at 32 weeks and 2 days to a 19yearold primiparous mother who had neither vaccination history nor antenatal followup. Her symptoms—fever, conjunctivitis, coryza, and maculopapular rash—began in the week preceding delivery, fitting classic measles presentation. The infant appeared initially stable but deteriorated rapidly: respiratory distress within 15 minutes of birth, generalized hypotonia, hypoglycemia, and tachycardia. Notably, no rash was present at birth, but by day 4 he developed highg rade fever, macular rash, and a hemorrhagic syndrome.

Laboratory findings demonstrated progressive leukopenia, lymphopenia, thrombocytopenia, elevated inflammatory markers (CRP, PCT), and evolving anemia. Radiography remained normal. Crucially, neither serologic testing nor anti-measles immunoglobulins were available—a major limitation that delayed confirmation and prevented immunoprophylactic intervention. PCR testing, performed offsite, confirmed measles in both mother and infant, with a higher viral load in the newborn (Ct 26), underscoring active congenital infection. The infant died on day 7 from septic shock with multiorgan failure.

The authors situate this case within broader public-health failures rather than purely clinical misfortune. Congenital measles has become rare in the post-vaccination era, but its re-emergence aligns with global declines in routine immunization. This case illustrates that prevention—timely measles vaccination among women of reproductive age—is the primary defense, as no specific antiviral therapy exists. While post-exposure immunoglobulin prophylaxis has evidence of benefit, its unavailability in Gabon removed the single potentially effective intervention for this neonate.

The report also exposes diagnostic inequities: simple IgM serology, a globally standard test, could not be performed. Rapid confirmation of measles is critical in neonates given their high risk of fulminant progression. The week-long delay in PCR results rendered the diagnosis clinically retrospective rather than actionable.

Furthermore, the infant's prematurity compounded his vulnerability. Measles during pregnancy is associated with complications including miscarriage, preterm birth, and maternal morbidity. Literature cited in the article indicates elevated neonatal mortality due to infection-related complications, mirroring this case's trajectory toward sepsis and hemorrhagic manifestations.

A key strength is the authors' integration of clinical detail with public-health analysis. By documenting laboratory trends, clinical evolution, and resource gaps, the report becomes a multi-layered case study with implications for policy.

However, the article's reliance on a single case limits its generalizability, though this is inherent to case reports. Another limitation is the absence of discussion on differential diagnosis during the infant's early presentation; sepsis versus congenital infection distinctions could have been explored more fully. Additionally, while the authors reference national vaccination gaps, more contextual data on Gabon's immunization infrastructure or barriers to maternal healthcare attendance would have strengthened the systemic critique

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