



UNCOMPLICATED MATERNAL COVID 19 INFECTION IN ANTENATAL PERIOD LEADING TO HYDROPS FETALIS

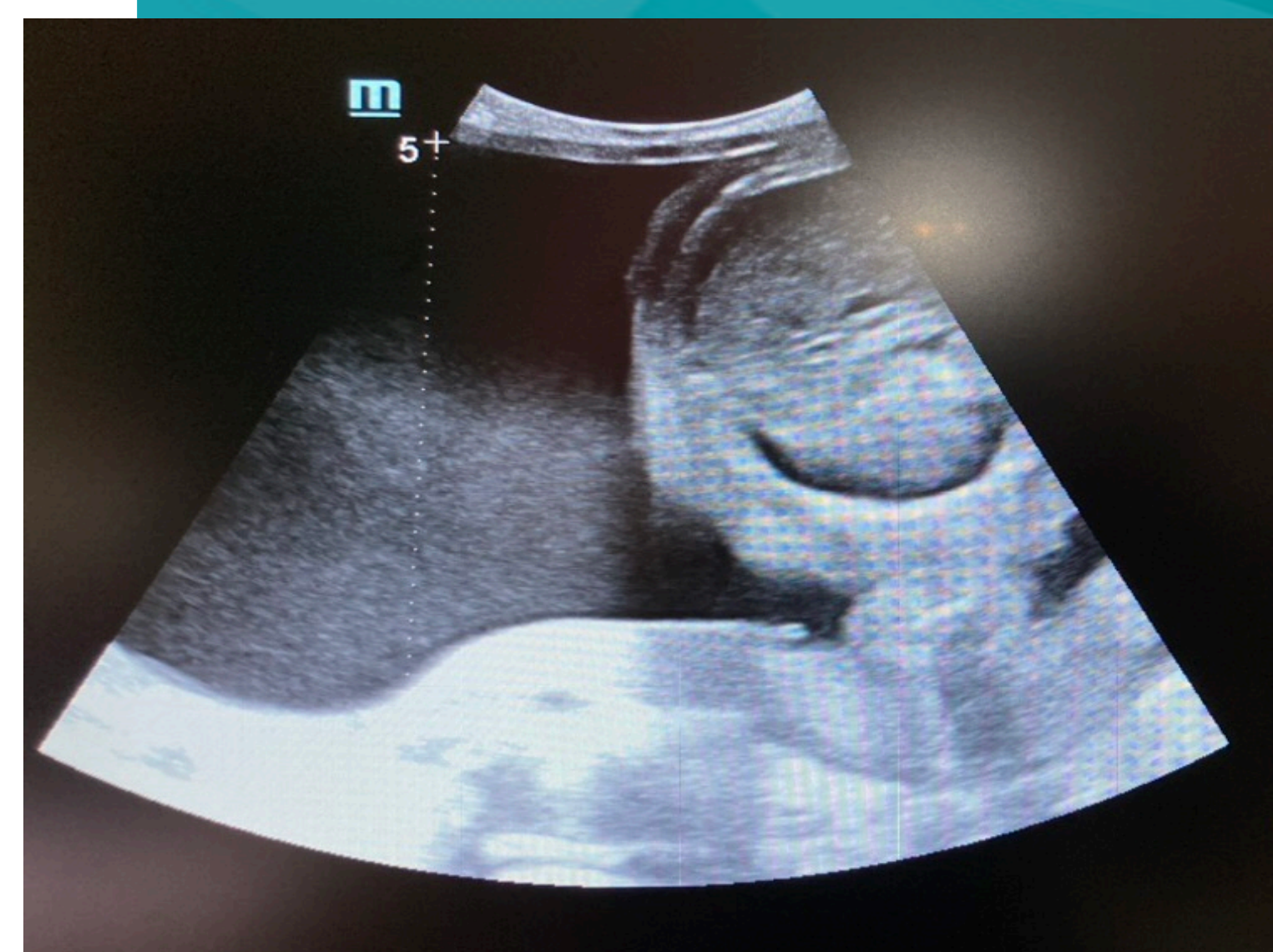
MMH Dissanayake¹, IC Kandauda², SSN Chandrasiri²,

¹Obstetrics & Gynaecology Unit, District General Hospital Matale, Sri Lanka

²Professorial Unit of Obstetrics & Gynaecology, Teaching Hospital Peradeniya, Kandy, Sri Lanka

Objectives

- Hydrops fetalis is a condition in which large amount of fluid build-up in body cavities, tissues and organs leading to edema.
- It is a lethal condition which developed in mid and late fetal development due to ineffective haemophoresis, excessive hemolysis and immune mediated mechanisms.
- A causal relation between COVID-19 and hydrops fetalis has not been demonstrated. A recent publication described a transitory fetal skin edema associated with polyhydramnios in a mother who recovered from a mild SARS-CoV-2 infection.



Case Report

- A 28 years old, second para mother with uneventful antenatal and preconception period presented at 28 weeks of period of amnorrhea to the antenatal clinic for growth assessment, found to have ascites, pleural effusions, pericardial effusion, and generalized skin edema.
- Department ultrasound scan revealed severe fetal hydrops and suggested to evaluate underlying causes.
- She had a history of covid 19 infection at 18 weeks of period of gestation where it has been managed with symptomatic measures without progressing to covid pneumonia or other covid related complications.
- She was vaccinated for covid 19 with 2 vaccine doses prior to pregnancy.
- Her routine booking screening and anomaly scan were uneventful.
- Urgent neonatology opinion taken regarding continuation of pregnancy.
- A baby weighting 1.9Kg was delivered at 33 weeks of gestation due to umbilical and middle cerebral artery doppler abnormalities.
- Neonate was admitted to neonatal intensive care unit and ventilatory support, exchange transfusion, nutritional support were arranged.
- Neonate was investigated for congenital infections which were negative except being positive for covid 19 IgM and IgG. Baby's condition improved with IV immunoglobulin and steroids.

Discussion

- Known immune mediated causes for fetal hydrops are Rhesus and ABO incompatibility, while non-immune mediated causes are maternal infections, fetal anaemias, chromosomal abnormalities, metabolic disorders, placental pathologies and congenital anomalies.
- In this patient available infective screening was negative. The haemoglobin level of the neonate was 16g/dl without evidence of rhesus and ABO incompatibility.
- No apparent congenital anomalies or dysmorphic features were found to suggest chromosomal or metabolic abnormalities.
- No abnormalities detected on placental histology.
- Baby was dramatically improved with Covid 19 neonatal treatment regimen.

Conclusion

- This is a rare presentation of having fetal hydrops following maternal covid 19 infections.
- Even-though it is not proven yet, there could be an association between maternal Covid 19 infection and fetal hydrops fetalis.