

A Case of Haemolytic Anaemia in Pregnancy Likely Secondary to Primary Cytomegalovirus Infection: Case Study and Report

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Background

Cytomegalovirus is the leading cause of congenital infections. Maternal infection has a wide range of clinical manifestations and haemolytic anaemia is a rare complication.

Aims

We report a case of haemolytic anaemia in pregnancy likely associated with primary cytomegalovirus infection and B12 deficiency.

Case

A 23 year-old, gravida 3 para 0 woman presented at 24 weeks gestation with three weeks of scleral icterus, fatigue, and nausea. She was Day 8 post SARS-CoV-2 infection diagnosed on rapid antigen testing. She was otherwise clinically well and normotensive. She had no significant personal or family history of haematological conditions, or history of close contact with young children. Bloodwork demonstrated a new haemolytic anaemia with haemoglobin level 86g/L, elevated reticulocytes, undetectable haptoglobin, spherocytes on film and mild hyperbilirubinemia. Her infection screen returned as CMV IgM and IgG positive with low avidity, suggestive of recent cytomegalovirus infection. She was also B12 deficient. There were no fetal ultrasound features of congenital CMV noted, and she declined amniocentesis for cytomegalovirus testing. She was closely monitored for the remainder of the pregnancy by the Obstetric and Haematology teams. Her infant was born in good condition after induction of labour at 39 weeks, and passed newborn hearing screening.

Results

Infant urine and saliva cytomegalovirus DNA PCR testing at birth was negative for congenital cytomegalovirus infection. Postnatal maternal testing demonstrated mild persistent anaemia despite B12 replacement and persistent mild reticulocytosis, for which monitoring is ongoing.

Discussion

This case acts as a reminder to test for cytomegalovirus in pregnancy where haemolysis is identified.