

Foetal anaemia presenting with abnormal cardiotocography & positive Kleihauer-Betke test

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Background

Foetal anaemia is a rare but potentially life-threatening condition that may present with decreased foetal movements (DFM) and non-specific cardiotocography (CTG) abnormalities prior to development of a sinusoidal pattern. This case highlights the clinical presentation and investigations, for DFM, and the importance of timely recognition and intervention.

Case

A 28-year-old multiparous woman presented at 37 weeks' gestation with a 24-hour history of DFM. No history of trauma, pain, or vaginal bleeding. With a background of maternal smoking, low pregnancy-associated plasma protein-A on first trimester screening, and aspirin until 36 weeks' gestation. She was Rhesus positive, placenta was fundal at morphology scan, and normal growth on serial growth ultrasounds.

On assessment, CTG demonstrated a baseline foetal heart rate of 160bpm with reduced variability, no accelerations, recurrent unprovoked decelerations, nonresponsive to intrauterine resuscitation. Bedside ultrasound showed an abnormal biophysical profile with absence of foetal breathing and foetal movements. The Kleihauer-Betke test was elevated at 62. At emergency caesarean section, intraoperative findings included a 100ml retroplacental clot and meconium-stained liquor. A live neonate was delivered in poor condition, with a haemoglobin of 49g/L, requiring transfusion. Both mother and baby recovered well. Placental histopathology returned as high grade foetal vascular malperfusion.

Discussion

DFM is a common presentation in the antenatal period. This case highlights the importance of prompt recognition of abnormal CTG features such as reduced variability, absent accelerations, and unprovoked decelerations, that may suggest foetal anaemia in the absence of a classical sinusoidal pattern. It also emphasises the value of bedside ultrasound in recognising a compromised foetus.

