

A Case of Undiagnosed Ruptured Vasa Praevia

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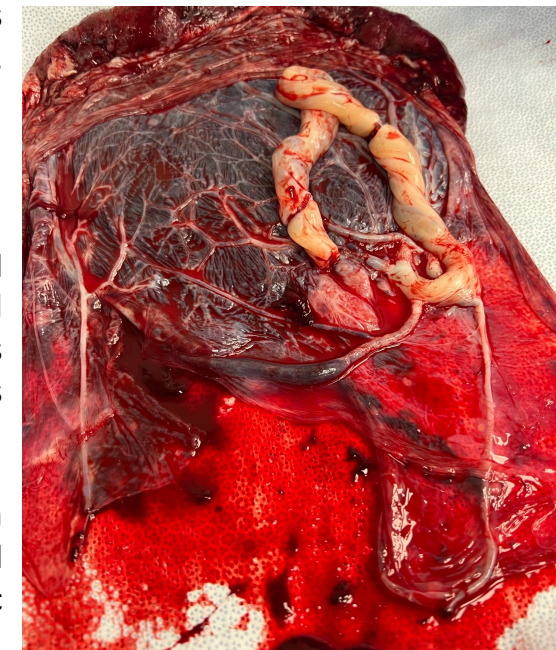


Background: Vasa praevia is a rare condition where unprotected fetal vessels cross the membranes overlying the cervical os. It has an incidence of 1 in 1,200 - 5,000 (1). Risk factors include velamentous cord insertion, bilobed placenta, placenta praevia, succenturiate lobe and IVF pregnancy. Rupture is associated with a high rate of neonatal morbidity and mortality.

Aims: Discussion of a case of undiagnosed ruptured vasa praevia and its outcome.

Case Study: A 37-year-old G3P1 female presented to a tertiary hospital with spontaneous rupture of membrane with blood-stained liquor at 38+4 weeks gestation. CTG demonstrated a sinusoidal pattern with complicated decelerations. Antenatal background included diet controlled gestational diabetes mellitus. Her previous delivery was a caesarean section. A marginal cord insertion was noted at nuchal translucency ultrasound and placenta was clear at morphology ultrasound. Growth ultrasound at 36+4 weeks gestation demonstrated a well grown baby.

She was delivered via category 1 caesarean complicated by a 1200ml postpartum haemorrhage. A 4.3kg neonate was born with apgars of 0 and 1 who received CPR and two red packed cell transfusions. Inspection of the placenta demonstrated a fetal vessel overlying the membrane where spontaneous rupture had occurred. Baby was diagnosed with grade 2 hypoxic ischaemic encephalopathy. 6 months postnatally, baby was deemed low risk of long term neurological developmental abnormalities.



Discussion and Conclusion: Undiagnosed vasa praevia has a significant risk of rapid fetal exsanguination and death secondary to rupture. Many international and local guidelines recommend elective admission to hospital between 30-32 weeks gestation and delivery via elective caesarean section between 34-36 weeks gestation to prevent this. There is no agreed consensus on timing of admission and delivery. Prophylactic management requires accurate antenatal identification of the vasa praevia. Universal screening is currently not recommended in asymptomatic with a singleton pregnancy due to lack of evidence (2). Further research into universal vs. targeted screening should be explored.

References:

1. Coleman G and Venables H. Is ultrasound screening for vasa praevia clinically justified and a financially viable screening test? A literature review. *Ultrasound Journal* 2018; 26: 6-15
2. Sullivan EA, Javid N, Duncombe G, Li Z, Safi N and Cincotta R. Vasa previa diagnosis, clinical practice, and outcomes in Australia. *Obstet Gynecol* 2017;130:591-8