Cord Prolapse Complicated by Thrombocytopenia and PPH: A Case Study

Dr Sarah Williams

John Hunter Hospital, Hunter New England Health, NSW Australia.

RANZCOG Regional SYMPOSIUM 2024 Glenelg
11 - 14 APRIL | STAMFORD GRAND GLENELG

Background

Umbilical Cord Prolapse is a major obstetric emergency associated with a high rate of perinatal morbidity and mortality[1]. It complicates 0.1 – 0.2 percent of births [2]. The risk of cord prolapse extends from an unengaged presenting part including hydramnios, breech, transverse lie, premature or small fetus and multigestation[2].

Case

MM was a 32 year old gravida 2 parity 1 with a background of gestational thrombocytopenia. She was under the care of a local haematologist with a comprehensive birth plan including regular platelet counts, analgesia requirements in labour, post-partum management of thrombocytopenia and blood product replacement in the event of an obstetric haemorrhage. She presented in spontaneous labour and was found to be 6 cm dilated with a normal ctg and a platelet count of 45 x 10^9/L. A vaginal examination was performed due to a prolonged deceleration where a cord prolapse was identified. Prompt emergency treatment was initiated which included elevation of the presenting fetal part (shoulder), transfer to the operating room for an immediate caesarean section, discussion with the anaesthetic team regarding general anaesthesia and blood product replacement in the event of haemorrhage. A live male neonate was born with Apgar's of 6 and 9 and was attended to by NICU. MM haemorrhaged 2.4 litres of blood and required intraoperative haematological input as well as 2 bags of platelets, 2 units of blood and 1 bag of cryoprecipitate. She made a full medical recovery and was discharged day 3 post-partum.

Discussion

While rare in incidence, Cord Prolapse can have devastating fetal and maternal outcomes. Delays in diagnosis and management correlates strongly to perinatal mortality, especially for women in rural locations, or those birthing in the home environment. Prompt identification with immediate management to expedite delivery gives the greatest chance of fetal survival.

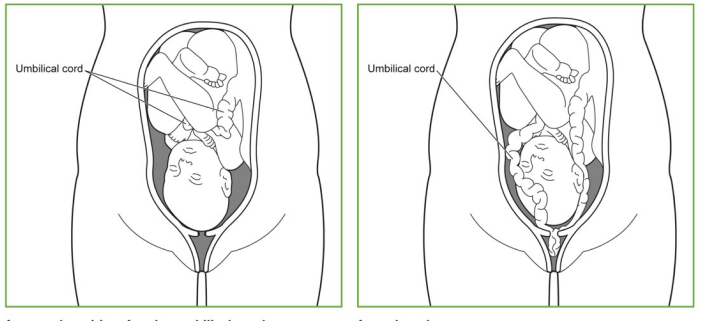

Figure 1: Normal position of the umbilical cord
Figure 2: cord prolapse exiting the cervix and vagina[3].

RANZCOG™ Excellence in Women's Health

Reference:

1. Adegbola O, Ayanbode O. The incidence, risk factors and determinants of perinatal outcome of umbilical cord prolapses in Lagos, Nigeria. Niger Med J. 2017 Mar-Apr;58(2):53-57. doi: 10.4103/0300-1652.219344. PMID: 29269981; PMCID: PMC5726173
2. Abnormal labor. Cunningham F, & Leveno K.J., & Dashe J.S., & Hoffman B.L., & Spong C.Y., & Casey B.M.(Eds.), [publicationyear2] *Williams Obstetrics, 26e*. McGraw Hill. https://accessmedicine.mhmedical.com.acs.hcn.com.au/content.aspx?bookid=2977&sectionid=255460820
3. Royal College of Obstetricians & Gynaecologists. Information for you, Umbilical Prolapse in pregnancy. [Internet]. London. July 2015. doi https://www.rcog.org.uk/media/piolvnsu/pi-umbilical-cord-prolapse-in-late-pregnancy.pdf