UTERINE DIDELPHYS TWIN PREGNANCY – A CASE REPORT

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Background

Uterine didelphys is a rare Mullerian abnormality with a prevalence of 0.3% and results from failure of the paramesonephric ducts to fuse (1,2). Spontaneous dichorionic diamniotic twin pregnancies in women with uterine didelphys, with one fetus in each cavity, is extremely rare with only a few case reports documented.

Case

A 38-year woman gravida 2 para 1 was referred to the maternal fetal medicine department with a dichorionic diamniotic twin pregnancy on a background of uterine didelphys with two uterine cavities, two cervices and previous resection of a longitudinal vaginal septum. Her obstetric history included a previous singleton pregnancy with spontaneous preterm labour at 29 weeks' gestation and forceps delivery of a boy weighing 1200g. Maternal fetal medicine ultrasound at 13 weeks showed one fetus in each cavity and the transvaginal cervical lengths were 31 and 30mm. Combined first trimester screening was high risk for trisomy 21 and intermediate risk trisomy 18 for twin 1 and intermediate risk trisomy 21 for twin 2. A non-invasive prenatal test was undertaken which was low risk for both twins.

Results

Given the uterine didelphys, twin pregnancy and previous preterm birth a mersilene modified shirodkar cervical cerclage was inserted around both cervices at 15 weeks gestation with normal subsequent cervical length monitoring. The patient was admitted with worsening pelvic pain at 31 weeks and steroid covered. Ultrasound in maternal fetal medicine at 33+1 showed Twin 1 EFW 1985g 24%, AC 30% and Twin 2 small for gestational age EFW 1773g 7% AC 9% with normal AFI and dopplers for both twins. The uterine septum was seen to be thin and full length from fundus to cervix. She had preterm prelabour rupture of membranes of Twin 2 in breech presentation at 33+2/40 with increasing uterine activity. She underwent a caesarean section with a pfannensteil skin incision, classical vertical uterine incisions on each cavity and intra-operative ultrasound used to identify the uterine septum. The cervical cerclage was removed at the end of the procedure and there was an estimated blood loss of 1900ml. She received 1 unit of packed red blood cells and 150mls via cell salvage.

Figure 1 Bilateral vertical classical uterine incisions

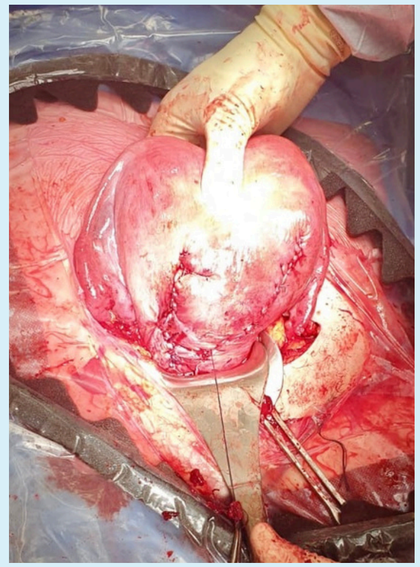

Figure 2 Exteriorised didelphic uterus with hysterotomies closed

Discussion

Twin pregnancies in women with uterine didelphys are extremely rare and high risk of complications such as preterm birth, malpresentation and growth restriction (1). Due to the low incidence there are no guidelines on management including prevention of preterm birth and mode of birth. There have been a few reported cases of vaginal births with dicavitary twins (3) although there is a high rate of caesarean section due to malpresentation and labour dystocia (2,4). This case report demonstrates the use of cervical cerclage for prevention of preterm birth and the utility of intra-operative ultrasound in caesarean section to determine uterine incision type and aid in avoiding injury to the uterine septum. Whilst a lower segment transverse uterine incision is preferred, in this case classical incisions were made due to the risk of damaging the thin uterine septum with transverse incisions.

Conclusion

Dicavitary twin pregnancies in women with a didelphys uterus are very rare and high risk. As such they should be managed with close fetal monitoring of growth and cervical lengths and mode of birth is largely determined by presentation and progress in labour.

References

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