

Delayed interval delivery in preterm premature rupture of membranes of previable of previable dichorionic triamniotic triplets: ethical considerations for maternal health.

Introduction:

Multiple pregnancies carry greater risks to maternal and foetal health than singleton pregnancies[1]. These risks include miscarriage, preterm premature rupture of membranes of previable (PPROM), and preterm birth. PPROM complicates 3% of all pregnancies and is associated with up to 30% of preterm births.[2] Up to 36% of twin and 28% of triplet pregnancies could be affected by PPROM before 28 weeks of gestation.[3-4]. The incidence of PPROM has increased in the last decade, primarily due to increased use of assisted reproductive technologies.[5]

Case Presentation

The patient was counselled about the foetal and maternal risks of a triplet pregnancy and was given the option of selective foetal reduction. She continued her early pregnancy progesterone pessaries (200mg nocte) and aspirin (150mg daily)

At 15 weeks 6 days of gestation, the patient presented with spontaneous premature prelabour rupture of membranes of the presenting singleton pregnancy. The couple were extensively counselled about the poor prognosis of her pregnancy with PPROM however they decided to continue with conservative management.

Two days after discharge, she re-presented with chorioamnionitis and the singleton was delivered manually, with the placenta left in situ and the umbilical cord was clamped and left in the vaginal vault. She was again managed as an outpatient with rotating antibiotics and monitoring for signs of chorioamnionitis.

At 18 weeks 3 days of gestation, the patient re-presented with PPROM of one MCDA twin and subsequently the pregnancy was terminated.

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Abstract:

A 37-year-old G1P0 dichorionic triamniotic triplet pregnancy had premature prelabour rupture of membranes (PPROM) of the singleton triplet at 15+6 weeks gestation. DID was offered to the parents, who chose to continue the pregnancy whilst acknowledging the risks to maternal health and the remaining fetuses. She was treated with prophylactic intravenous (IV) antibiotics and discharged on oral antibiotics after an 8-day admission. Two days after being discharged she was readmitted with clinical signs of chorioamnionitis. Within 6 hours the PPROM singleton was delivered. Three days later she again presented to the hospital with PPROM of one of the dichorionic twins. After discussion with the maternal foetal medicine team, the parents chose to terminate the pregnancy. DID was not successful in this patient and it is unclear at which gestation it is too early to offer expectant management. Furthermore, a standardised management of DID should be established to assist with consistent parent counselling.

Conclusion

- Counselling of patients on maternal morbidity and mortality in DID is one of the most important factors provided by the care provider.
- More research needs to be done on the role of routine cervical cerclage in preventing ascending infections after the first delivery.
- We also delivered our first foetus when the patient had likely chorioamnionitis in contrary to the other studies. This could this have been a factor in our study that lead to an unsuccessful delayed interval delivery (DID).
- DID is unlikely to be successful in the previable period specifically <20 weeks gestation
- Standardised management in DID needs to be established.

Discussion

A systematic review conducted by Cheung et al. included three cases of dichorionic triamniotic triplets.[1] The study concluded that DID is associated with improved perinatal outcomes for those second twins/triplet pregnancies when the first twin was delivered between 20-29 weeks.[1] In our case however PPROM occurred at a very previable gestation of 15 weeks. Two studies have reported on PPROM of a singleton in a triplet pregnancy which was managed through DID [6,7]. One pregnancy had already a cervical cerclage and the other was given a rescue cerclage. Both had good outcomes for mother and babies. We had managed our women similar to the other cases although did not offer a cerclage. A study into obstetric DID in cerclage and non-cerclage reported in twin and triplet pregnancies found that cerclage may provide a longer interval. However, there was no consensus on the best treatment protocol and each case should be individually evaluated.[8] We did not offer our woman a cerclage as an ultrasound showed her cervix to be long and closed. Cervical cerclages are controversial without cervical incompetence as some suggest that the actual procedure puts the patient at risk to further infection and can contribute to rupture of membranes of the remaining foetus.[9] In antenatal counselling patients are not satisfied with the care provider if only a negative outlook is taken and the primary focus is the on poor outcomes [10]. Antenatal consultations for extremely preterm infants noted that parents do not want to hear statistics but would like for their personal needs to be acknowledged in the shared decision making process. We involved our patient in her decisions given the complexity of her pregnancy.

References

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