OBSTETRIC OUTCOME FOLLOWING TRIAL OF INSTRUMENTAL DELIVERY IN THEATRE

Ayushi Sahu, Melanie Chui, Dayae Lah, Thangeswaran Rudra

Royal Brisbane and Women's Hospital, Australia

INTRODUCTION

Instrumental delivery rates have been constantly decreasing from 6-10% over the past few decades with corresponding rise in second stage Caesarean section either for unsuccessful instrumental delivery or unsuitable for instrumental delivery. This is primarily due to lack of skills by the accoucheurs who are to perform rotational instrumental delivery and manual rotation skills during labour. As well as fear of medico legal implications. Performing CS a second stage is bound to have high maternal and perinatal morbidity and mortality resulting in some women suffering from post traumatic stress disorder apart form the complications as a result of the intervention. This study was designed to analyse the indications for trail of instrumental delivery and the outcome.

OBJECTIVES

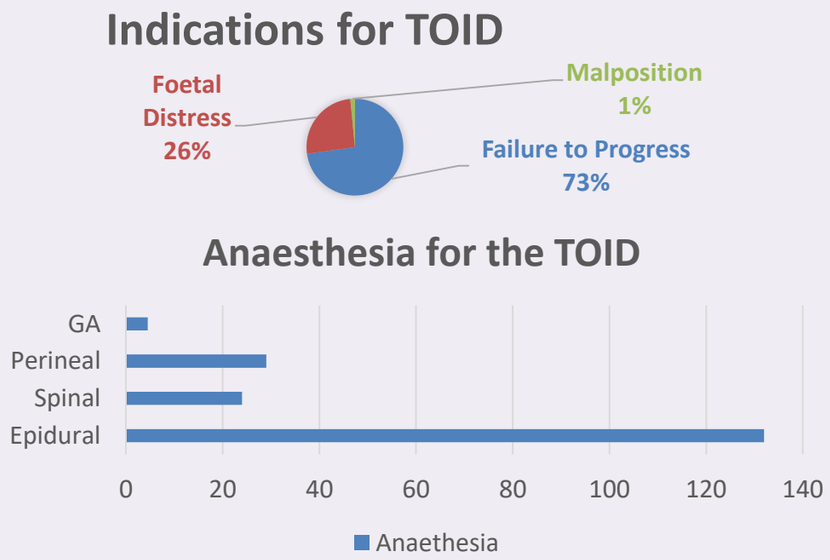
This study was conducted to analyse the obstetric and neonatal outcomes of mothers who had undergone trial of instrumental delivery in theatre

METHOD

This was a retrospective observational study of women who had undergone a trial of instrumental delivery (TOID) in the operating theatre at the Royal Brisbane and Women's Hospital, Queensland between 2014 and 2018. Women who had an emergency caesarean section without a trial , those who had instrumental delivery in the birth suite were excluded. Primary outcome measures were mode of delivery, maternal complications and perinatal morbidity and mortality.

RESULTS

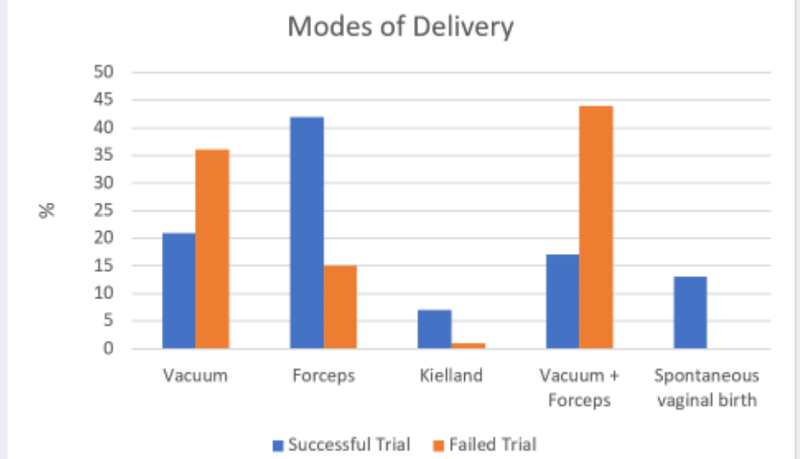
There were 259 patients that underwent a trial of instrumental delivery in the operating theatre.

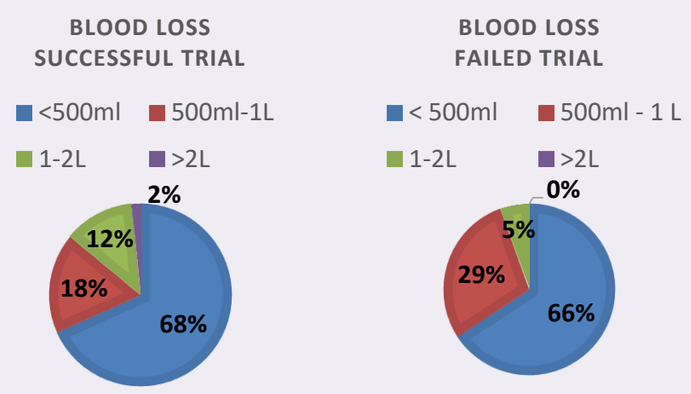


All 3 who had GA had an instrumental delivery

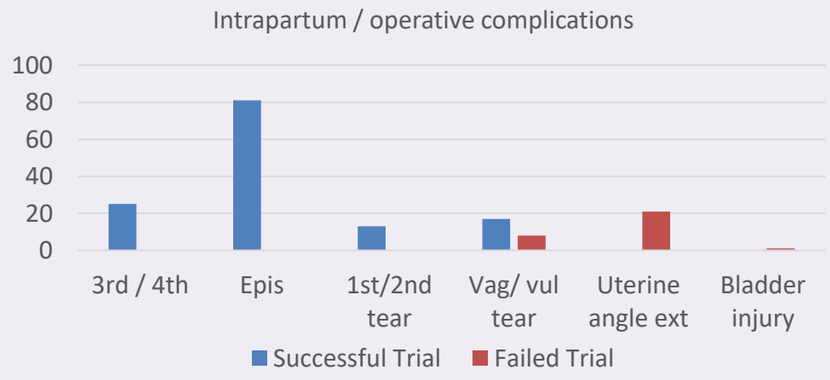
Some of those who had Epidural had to have perineal infiltration

70.26% had successfully delivered vaginally either with or without using forceps or vacuum and 29.74% needed an urgent Caesarean section following unsuccessful instrumental delivery. Overall rates of vacuum, forceps and sequential instrumental delivery were 25.1%, 39.8% and 24.7% respectively.





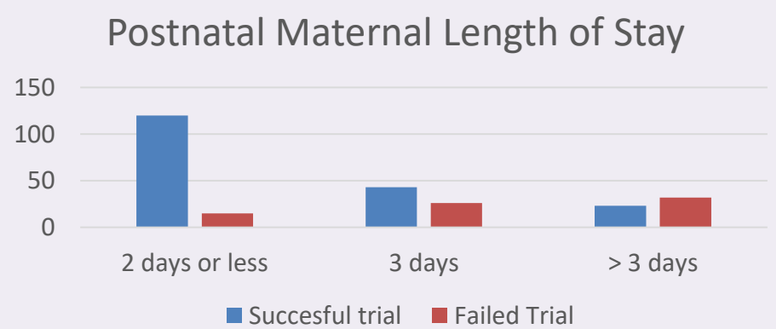
* Highest blood loss successful trial 3L vs Failed trial 1.8L

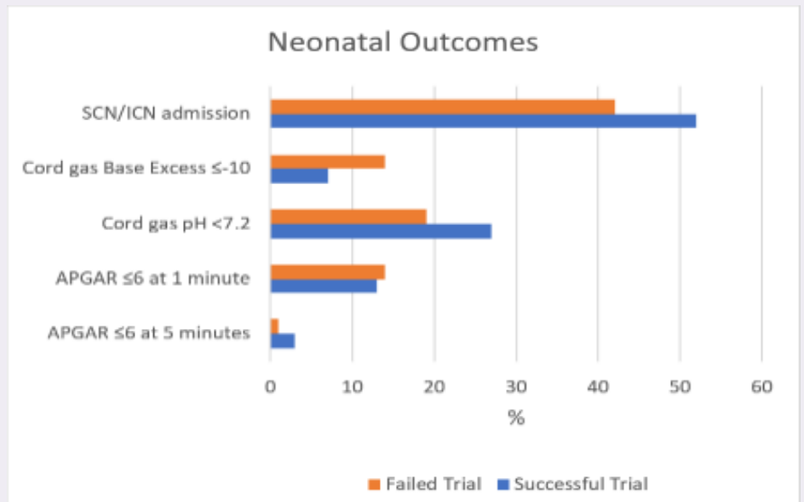


29.8% had uterine angle extension of who had failed trial vs 12.4% major perineal tear

None of them had peripartum hysterectomy

None had issues with delivery of the baby during Caesarean Section



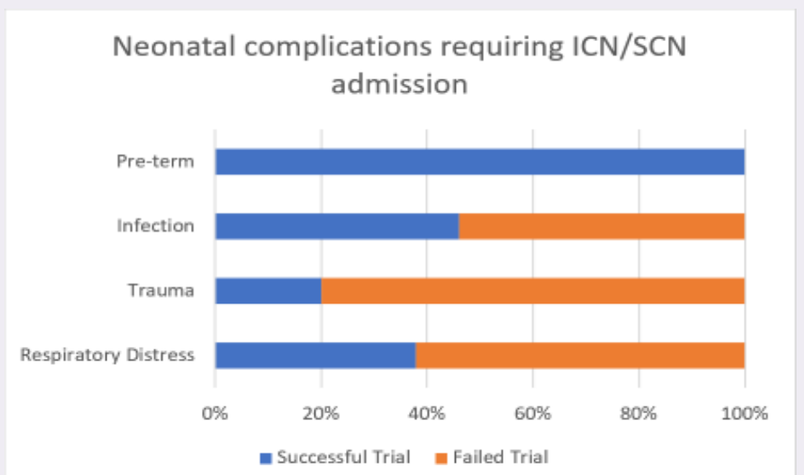


13.6% of the babies had an Apgar score of ≤6 and three had severe asphyxia

25.1% had cord pH < 7.2

16.6%, 15.8% of babies respectively needed respiratory support or had birth trauma.

No neonatal deaths or still Births in either group



CONCLUSION

Overall, the rate of successful instrumental deliveries was much higher (85-95%) were much higher than in our study. Additionally, complications such as the need for sequential instrumental delivery, maternal perineal trauma or neonatal birth trauma occurred at a significantly higher rate. Hence, this study demonstrates the risks of women undergoing trial of instrumental delivery and therefore, highlights the importance of early senior input to optimise the outcome.

REFERENCES

GM Muraca et al; Perinatal and maternal morbidity and mortality among term singletons following midcavity operative vaginal delivery versus caesarean delivery: BJOG An International Journal of Obstetrics and Gynaecology 693-702

HANAN AL-KADRI et al: Failed individual and sequential instrumental vaginal delivery: contributing risk factors and maternal´–neonatal complications; Acta Obstet Gynecol Scand 2003: 82: 642—648

Sónia Barata, Edite Cardoso, Susana Ferreira Santo, Nuno Clode & Luis Mendes Graça; Maternal and neonatal immediate effects of sequential delivery;; The Journal of Maternal-Fetal & Neonatal Medicine, 25:7, 981-983