

# COMPARISON OF OUTCOMES IN SECOND-STAGE CAESAREAN SECTION WITH AND WITHOUT A TRIAL OF INSTRUMENTAL DELIVERY IN THEATRE

Metro North  
Hospital and Health Service

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## INTRODUCTION

The increasing rates of second-stage Caesarean sections (CS) and corresponding decline in instrumental delivery are deemed to be attributed to fear of the clinical and litigious outcomes.<sup>1</sup> As CS at full dilatation is perceived to be more complex with higher morbidity and mortality, our study was designed to analyse the maternal and neonatal outcomes from second-stage CS with and without a trial of instrumental delivery (TOID).

## METHOD

A retrospective observational study of all term, singleton, cephalic second-stage CS with and without a TOID in the operating theatre (OT) was conducted from 2013 to 2018 at the Royal Brisbane and Women's Hospital. Women were classified into two groups: failed TOID (**study**) and emergency second-stage CS without TOID (**control**). Electronic and paper charts were used. Poor maternal delivery, puerperium and neonatal outcomes were identified.

## RESULTS

A total of 280 women had a second-stage CS. 72 (25.71%) had a failed TOID in OT before CS. 208 (74.29%) had a CS without TOID.

Maternal length of stay (LOS) >2days was higher in CS without TOID (99.04% vs. 88.89%) (p<0.001).

Overall, failed TOID before CS was not more likely to result in maternal complications like organ injury (p=0.768), uterine angle extension (p=0.484), ICU/HDU admission (0.089), wound complications (0.19), infection (0.521).

	Study	Control	p-value
Blood Loss (>1L)	12	43	0.619
Uterine Angle Extension	14	33	0.484
Organ injury	1	4	0.768
ICU/HDU	1	0	0.089
Wound Complications	4	5	0.191
Infection	10	23	0.521
LOS (>2 days)	64	206	<0.001

Table 1: Maternal Complications

Overall, neonatal injury was significantly higher in failed TOID (p<0.001).

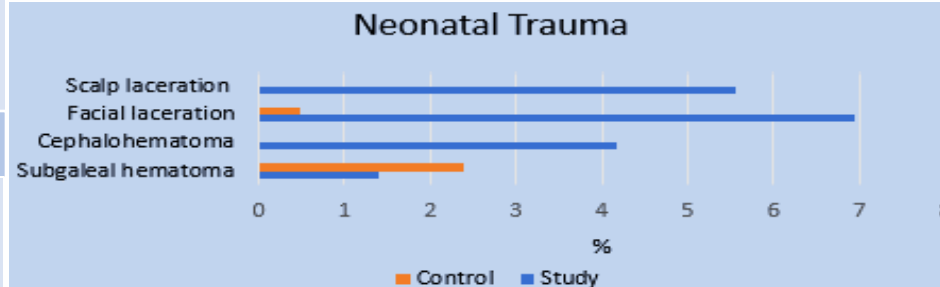
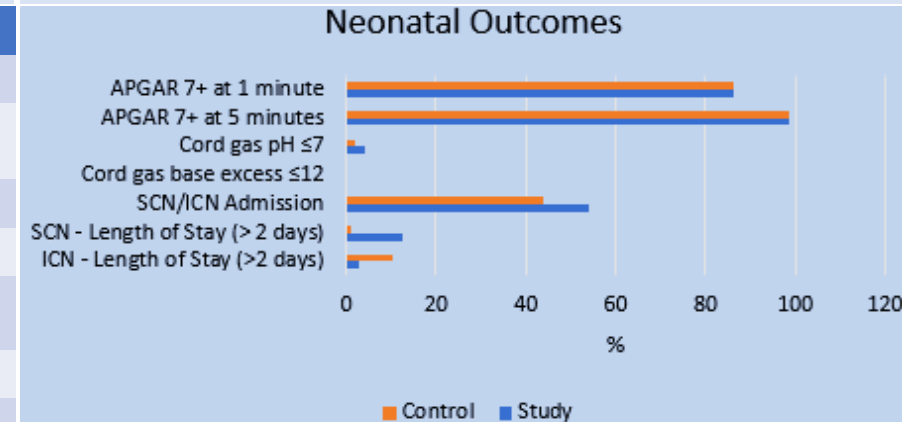


Figure 1: Neonatal Trauma

Neonates from CS only had longer ICN admissions >2 days (10.09% vs. 2.78%) (p<0.001).

Neonates from failed TOID had longer SCN admissions >2days (12.5% vs. 0.96%) (p<0.001).

Failed TOID was not more likely to result in abnormal APGARs or cord gases.



## CONCLUSION

1. Failed TOID before CS was not associated with increased maternal delivery/puerperium complications apart from increased LOS
2. Failed TOID before CS was associated with increased neonatal injury and SCN LOS
3. CS without TOID was associated with increased ICN LOS
4. Our study highlights the importance of appropriate judgement and senior guidance for the decision for TOID

### REFERENCES

1. 1. Black C, Kaye JA, Jick H. Caesarean delivery in the United Kingdom: time trends in the general practice research database. *Obstet Gynecol* 2005;106:151-5.