

Remifentanil in Labour

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Background

Remifentanil has become a recent addition to pain management in the intrapartum period with Pethidine having been phased out at Ballarat Health Services. Whilst having been on the market for a while now, its introduction into the labour ward has been only recent due to the scarcity of high quality data in regards to its efficacy and side effect profile. With the recent RESPITE trial, data has shown that Remifentanil is indeed superior than the other opiod methods in labour in regards to analgesia and overall side effect profile.

Objectives

The aim of this retrospective cohort study was to determine the efficacy of Remifentanil in labour, assess the side effect profile as well as overall patient satisfaction

Methods

A retrospective cohort study was conducted over a period of 6 months, from January to June 2018 of patients in Ballarat Health Services. Of the 641 births, 45 subjects were identified. All patients used Remifentanil at 20 mcg/ml. Patients were aged 19- 40 years old with BMIs of 20-38 and generally 37-41 weeks gestation. Outcome parameters were identified i.e. Maternal Outcomes, Labour, Analgesia and Neonatal Outcomes.

Results

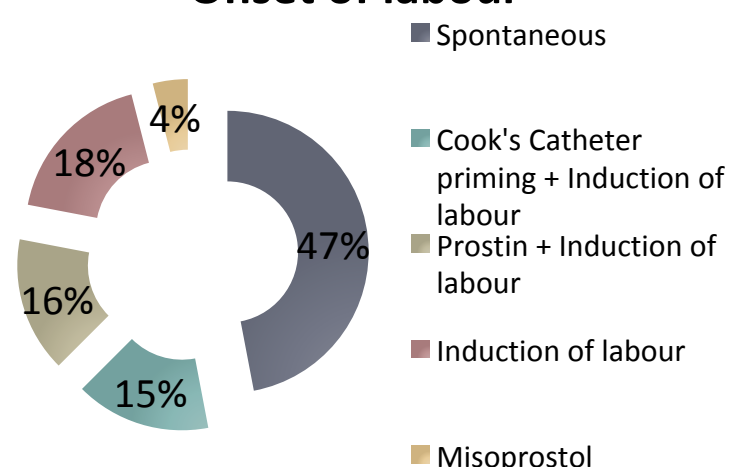
Maternal Outcomes

- 0 patients required intrapartum oxygen
- 0 patients desaturated to < 95% on RA
- No patients required intervention for a sedation score of 2 or more

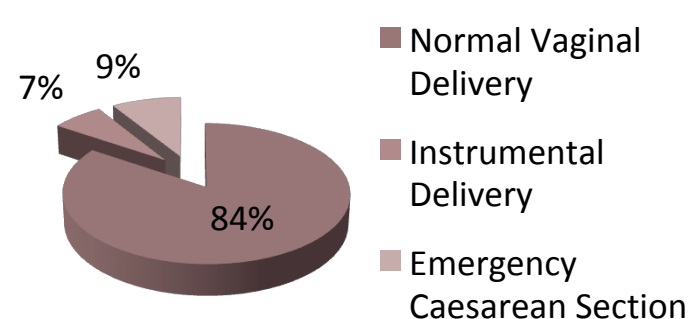
Labour

- Onset of labour
- Mode of delivery

Onset of labour



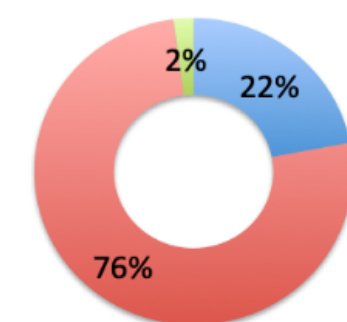
Mode of delivery



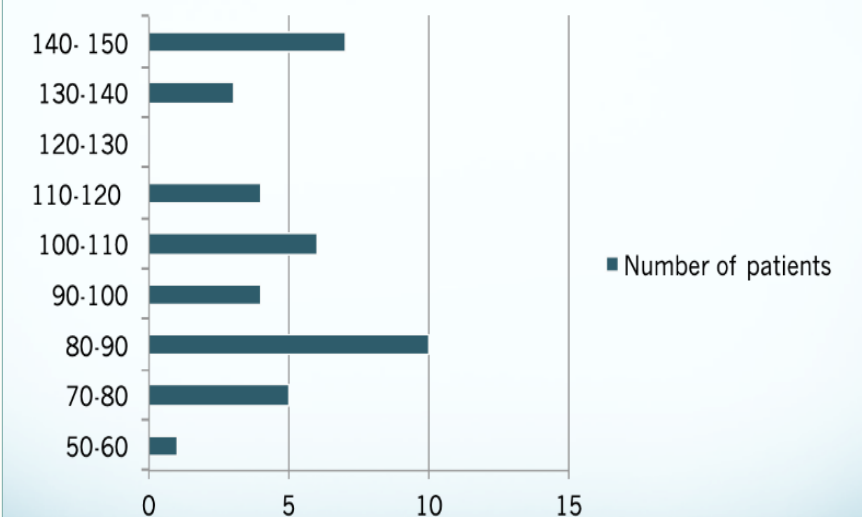
Analgesia

Analgesia prior to remifentanil

- No analgesia
- Nitrous oxide
- Nitrous Oxide + Morphine



Dosage of Remifentanyl



17.9% progressed to an epidural

Neonatal Outcomes

- APGAR- All liveborn neonates had an APGAR >6 at 5 minutes of life
- Admissions to SCN: 3x due to RDS, 2x due to sepsis

Maternal Satisfaction

Overall patients were satisfied or very satisfied with Remifentanil. 1 patient was not satisfied.

Conclusion

Overall the outcome of this study are promising with 93% of neonates not requiring a SCN admission and only 18% of the population progressing to an epidural.

References

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J.M.Blair, G.T. Dobson, D.A. Hill, J.P.H. Fee. *Anaesthesia: Peri-operative medicine, critical care and pain*, Volume 60, Issue 1, 2005 January, Pages 22-27
3. Remifentanil for labour analgesia: a meta-analysis of randomised controlled trials
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