

Relationship between remifentanil PCA usage and the Anaesthetic Topics for Midwives (AToM) course

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Introduction

Remifentanil patient-controlled analgesia (PCA) is an established form of labour analgesia in our unit and its uptake has been increasing. We show an association in improved post-course confidence scores at our Anaesthetic Topics for Midwives (AToM) course and increasing remifentanil uptake. This demonstrates that our midwifery colleagues are becoming more confident in recommending and in caring for women on remifentanil PCA.

Methods

At each AToM course, participants complete a pre- and post-course survey noting their confidence in each topic. Numbers of women using remifentanil PCA each month were taken from controlled drug records.

Results

Remifentanil PCA use has been trending upwards over the last two years (figure 1). Remifentanil usage numbers were higher in each 2020 annual quarter than in 2019: 37; 48; 53 & 44 vs 17; 23; 29 & 30.

At each of six AToM courses, pre- and post-course confidence measures (**1** = very confident; **4** = no confidence) improved for each attendee. Pre- and post-course aggregate scores by topic were:

- complications of neuraxial anaesthesia: **2.52** vs. **1.77**;
- team management of difficult airway: **3.07** vs. **1.98**;
- managing opioid-induced respiratory depression: **2.73** vs. **1.89**; and
- invasive monitoring: **3.36** vs. **2.02**.

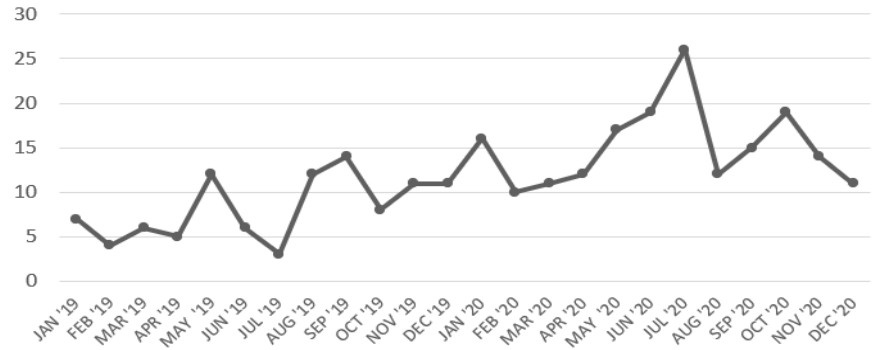


Figure 1: Number of women using remifentanil PCA

Discussion

Women's decisions regarding analgesia can be influenced by their midwife. During June-August 2020, a separate survey of our patients who used remifentanil (with 60% response rate) found that the primary source of knowledge on remifentanil was a labour ward midwife (14/28) compared to prior knowledge (5/28) or anaesthetist recommendation (9/28). Remifentanil PCA has good rates of satisfaction although efficacy is lower than epidural analgesia. Rapid metabolism ensures side-effects are transient and neonatal sedation is avoided. Other advantages include avoidance of PDPH and motor block.

Our AToM half-day course includes a tutorial on remifentanil and a simulation on management of opioid-induced respiratory depression. Improved knowledge and confidence among midwives have likely contributed to improved access to remifentanil PCA. We aim to organise frequent AToM courses to give all midwives access to this valuable learning opportunity.

Reference

1. Weibel S, Jelting Y, Afshari A, et al. Patient-controlled analgesia with remifentanil vs. alternative parenteral methods for pain management in labour. Cochrane Database Syst Rev 2017; 4: 4