

# Confidence of junior doctors in prescribing and using patient-controlled analgesia and epidurals, and the impact on patient satisfaction

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## Aims

Patient-controlled analgesia (PCA) and epidural are popular choices of analgesia postoperatively and in patients with complex pain syndromes. The aim was to assess the confidence of junior doctors in prescribing and monitoring PCA and epidurals on the ward. Additionally, we assessed the impact that this had on patient satisfaction.

## Methods

A survey was sent to all doctors of a UK hospital assessing confidence with PCA and epidural use between 1 December 2014 and 1 February 2015. We collected data on the participants' specialty, confidence ratings with PCA and epidural use, as well as the dose and medications they would usually prescribe for each modality. Participants were asked about their confidence with changing settings or delivering a bolus with each mode of analgesia. Previous teaching on PCAs and epidurals was also recorded.

Additionally, 30 consecutive patients prescribed PCAs were surveyed on what information they received, by whom, satisfaction ratings and adequacy of analgesia.

## Results

There were 60 responses (anaesthetics, n=27; medicine, n=8; surgery, n=20; and obstetrics, n=5). The distribution of training grade of respondents was similar between anaesthetic and non-anaesthetic trainees ( $p=0.02$ ).

Overall 50% were confident with prescribing a PCA and 35% an epidural.

Anaesthetists were much more confident than non-anaesthetic trainees: PCA (100% vs 12%;  $p<0.0001$ ), Epidural (63% vs 0%;  $p<0.0001$ ) and were more confident adjusting a PCA to pain response (100% vs 5%;  $p<0.0001$ ).

Only anaesthetists felt confident with monitoring an epidural (89% vs 0%;  $p<0.0001$ ).

45% prescribed a PCA correctly and 18% prescribed an epidural correctly. Anaesthetists were more likely to prescribe them correctly (60% vs 5%;  $p<0.0001$ ).

42% had received training on PCA and 20% on epidural use. Anaesthetist vs non-anaesthetists (85% vs 12%;  $p<0.0001$ ) and (44% vs 3%;  $p<0.0001$ ) respectively.

93% of patients received nurse-led verbal information about their PCA. None had received written information. Of these, 82% were happy with the information provided. 73% of patients felt their pain was well controlled overall, but 66% reported an episode of pain that was uncontrolled for  $\geq 45$  min.

## Conclusions

Confidence regarding PCA and epidural use is generally low, with the exception of anaesthetists. However, the anaesthetic team may not always be able to attend a pain-related emergency, leading to pain and dissatisfaction.

Patient education was delivered by nurses and was not retained well. Continued dialogue between patients and doctors as well as a patient leaflet may engage patients and contribute to greater satisfaction.

We recommend regular training in PCA use and epidural monitoring to increase confidence levels and contribute to patient safety and satisfaction. ■

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