

Optimising peri-operative analgesia for ACLR repair

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Introduction: The service level report generated by GIRFT (Get It Right First Time) showed that the average length of stay (LoS) for Nottingham University Hospitals (NUH) Trust following Anterior Cruciate Ligament Repair (ACLR) from April 2017 to March 2018 was 1.35 days, compared to a national average of 0.13-day. Reducing our LoS to match the national average could save an estimated £45,000 by facilitating day case surgery and avoiding inpatient stay.

Aims: We evaluated anaesthesia services with a focus on post-operative pain and PONV (post-operative nausea and vomiting), which may be contributing to this increased LoS. Based on this review we have recommended changes in practice which could help facilitate on-the-day discharge.

Methods: Data was collected for 113 patients who underwent ACLR in NUH between March 2018 and March 2019. Pain and PONV scores were collected and analysed from recovery and at 6, 12, 18 and 24 hours post-operatively using electronic observation data.

Results: PONV was well controlled with 2% of patients experiencing PONV in recovery and 9% at six hours post-operatively. Forty-seven patients (43%) experienced moderate to severe pain in the recovery room (Fig.1) and 11 patients (10%) experienced moderate to severe pain at 6 and 12 hours. Four patients (4%) received intra-op local anaesthetic infiltration, none of whom (0%) experienced moderate-severe pain in the recovery room. No significant intra-operative variations in systemic or regional analgesia were identified.

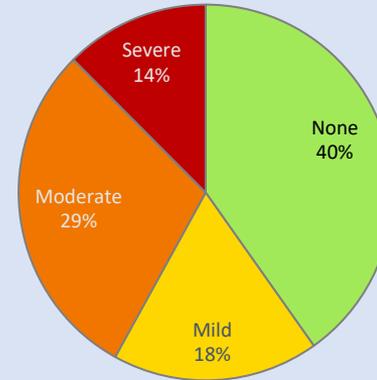


Fig. 1
Percentage of patients reporting pain (categorised by intensity) in recovery following ACLR. (n=102).

Conclusion: Use of intra-op local anaesthetic infiltration has been shown to improve pain control for up to 24 hours in ACLR [1]. We suggest use of local anaesthetic infiltration or regional anaesthetic nerve block for all patients as well as the use of multi-modal post-operative analgesia consisting of paracetamol, NSAID and strong opioid for the first 48 hours to provide optimal analgesia, facilitate day case surgery, improve patient satisfaction and save revenue for the Trust.

References: [1] Ramlogan, R., Tierney, S., & McCartney, C. Anterior cruciate ligament repair and peripheral nerve blocks: time to change our practice? *British Journal of Anaesthesia*, 123(2), e186–e188. (2019).