

Methods A literature review was performed in the PubMed database using the keywords "intravenous lidocaine", "postoperative analgesia", and "hip surgery". Articles and reviews from the last 5 years were included. Studies in children under 18 years of age and pregnant were excluded.

Results

Abstract B341 Table 3

2008 Martin et al	2019 Baca Q et al
No significant differences regarding morphine requirements at 4h, 24h and 48h	Significant decrease in postoperative pain (30%), maximum pain (48%), and opioid consumption (39%).

Table 3. Evidence in hip surgery

Abstract B341 Table 1

Moderate level of evidence	Low level of evidence
Pain reduction	Reduction in opioid use
Reduction of nausea and vomiting	Shorter hospital stay
	Early recovery from paralytic ileus

Table 1. Clinical effects of perioperative intravenous lidocaine.

Abstract B341 Table 2

Plasma levels	Effects
0.5-5 mcg/ml	Desired clinical effects
> 5-8 mcg/ml	Minor adverse effects: perioral paresthesias, slurred speech, diplopia, tinnitus, metallic taste, lights or flashes, muscle twitching, and seizures
>15 mcg/ml	Major neurological effects: decreased level of consciousness, seizures, or coma
> 21 mcg/ml	Cardiotoxic effects: myocardial depression, arrhythmias, and cardiorespiratory arrest

Table 2. Plasma concentrations and adverse effects.

The reported benefits are included in Tables 1 and 2. Effects occur at low plasma concentrations during the infusion and persist for hours and even days afterward. The main mechanism of action is the reduction of inflammatory markers (leukotrienes-B4 and interleukin-1). The antinociceptive and antihyperalgesic action is multifactorial (like muscarinic, dopaminergic, and NMDA receptors). Despite its scientific evidence in multiple interventions, especially abdominal and urological, its evidence in hip surgery is scarce (Table 3).

Conclusions Perioperative intravenous lidocaine is strongly recommended in a wide variety of surgeries as a postoperative analgesic technique. However, it is not recommended in hip surgery because of the scarcity of studies and their contradictions.

B342

AUDIT OF POST OPERATIVE PAIN RELIEF FOLLOWING KNEE LIGAMENT RECONSTRUCTION AT WRIGHTINGTON HOSPITAL, A CENTRE OF EXCELLENCE FOR ORTHOPAEDIC SURGERY

J Cleland*, T Mcgregor, M Hulgur. *Wrightington, Wigan and Leigh Teaching Hospitals NHS Foundation Trust, Wigan, UK*

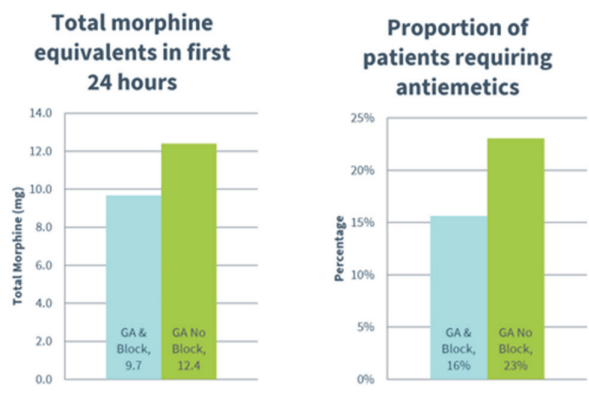
10.1136/rapm-2022-ESRA.416

Background and Aims Lower limb ligament reconstructions can be painful procedures¹. Central neuro-axial blocks and some regional techniques are relatively contraindicated as preserving

motor function aids rapid patient recovery and same day discharge². Analgesic techniques vary. The aim of the audit was to achieve a snapshot survey of current practice and relevant outcomes.

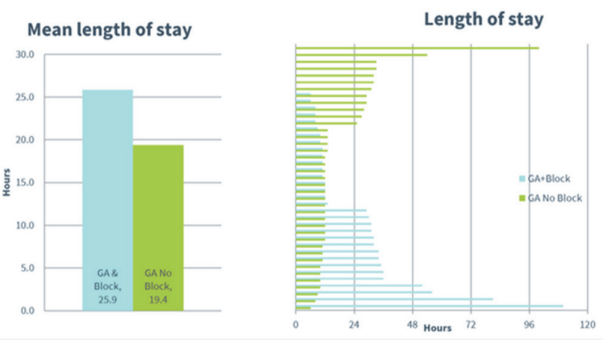
Methods With approval from the audit team the theatre database was searched for relevant procedures between April 2019 and March 2020. 97 cases were identified, of which 74 case notes were analysed. The following features were audited: anaesthetic time, theatre time, ASA, demographics, chronic pain history, anaesthetic technique, post-op pain, morphine requirements, antiemetic requirements and length of stay.

Results 95.9% of cases involved general anaesthesia and 4.1% spinal anaesthesia. 56.8% received no nerve block, 39.2% received an adductor canal block and 4.1% received a femoral nerve block. Mild/no pain was reported by 61.5% of patients without a nerve block and by 71.9% who did receive a nerve block. Patients who received a nerve block required less morphine within the first 24 hours (9.7mg vs 12.4mg) and less antiemetic therapy (16% vs 23%).



Abstract B342 Figure 1

Patients who received a block had a longer length of stay (25.9 hours vs 19.4 hours).



Abstract B342 Figure 2

Conclusions Just under half of cases received a nerve block. The use of adductor canal block is associated with modestly reduced post-op pain and consequently reduced morphine requirements and post-operative nausea. Adductor canal blocks are associated with increased length of stay. Patients were not randomised between techniques so differences in outcomes could be due to confounding factors.