



MULTIDISCIPLINARY USE OF INTRAVENOUS LIDOCAINE IN THE PERIOPERATIVE SETTING AT A TERTIARY PEDIATRIC HOSPITAL

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Introduction

- Intravenous lidocaine (IVLI) have been shown to exert analgesic, anti-inflammatory and anti-hyperalgesic effects.
- At our tertiary pediatric hospital, we have incorporated IVLI into multiple surgical protocols for multimodal pain management.
- IVLI is used in sleeve gastrectomies, posterior spinal fusion, supracondylar fractures, and breast reduction surgery.

Results

- IVLI in sleeve gastretomies have showed decrease opioid use and decrease length of stay. (Figure 1a, 1b)
- IVLI in supracondylar fracture repairs have shown to reduce intraoperative and perioperative opioid requirements (Figure 2)
- IVLI in patients undergoing posterior spinal fusion for adolescent idiopathic scoliosis have shown to reduce total opioid use (MME/Kg) when compared to liposomal bupivacaine (*Exparel*) (Figure 3)

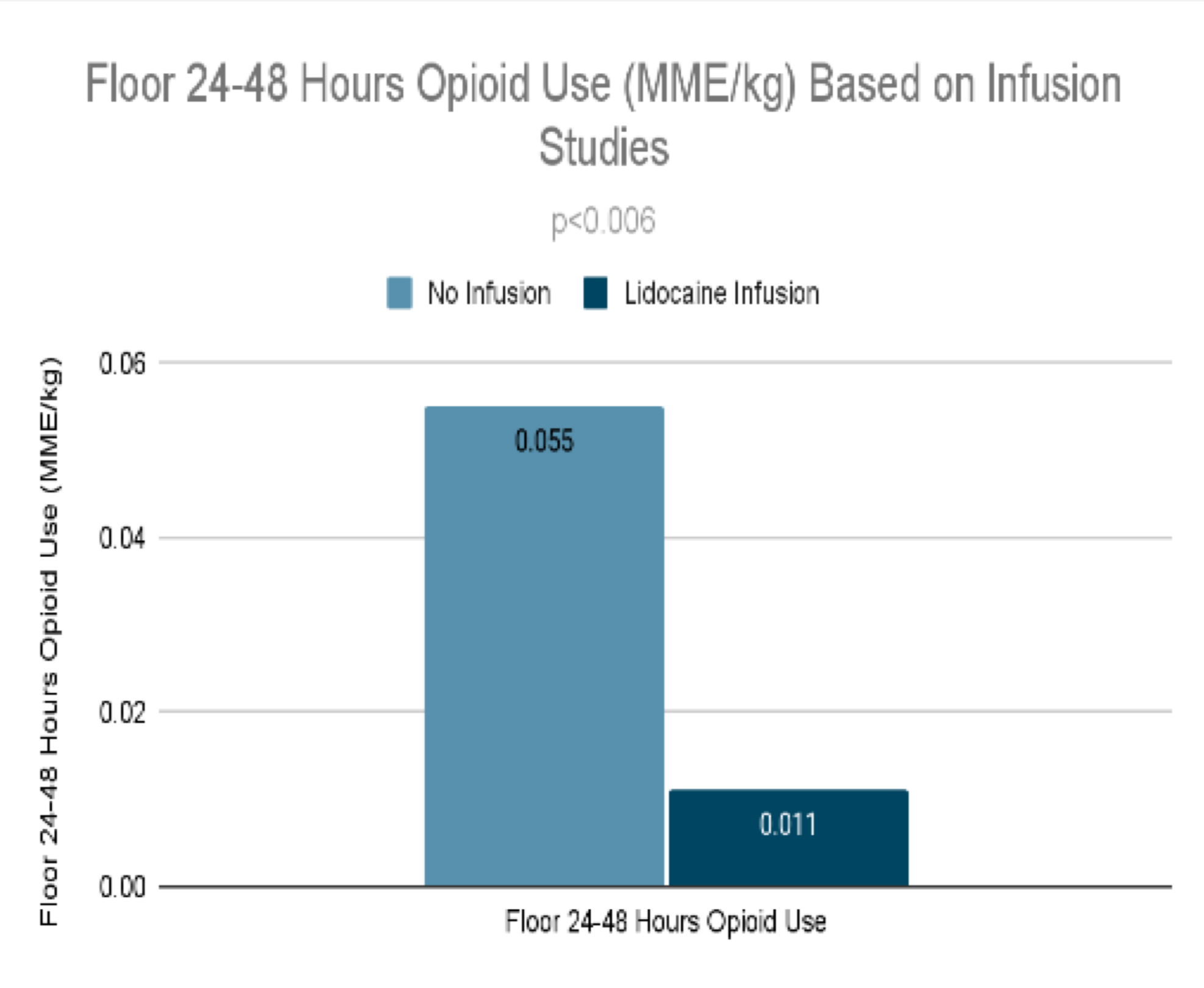


Figure 1a. Post operative opioid use in patients undergoing sleeve gastrectomies

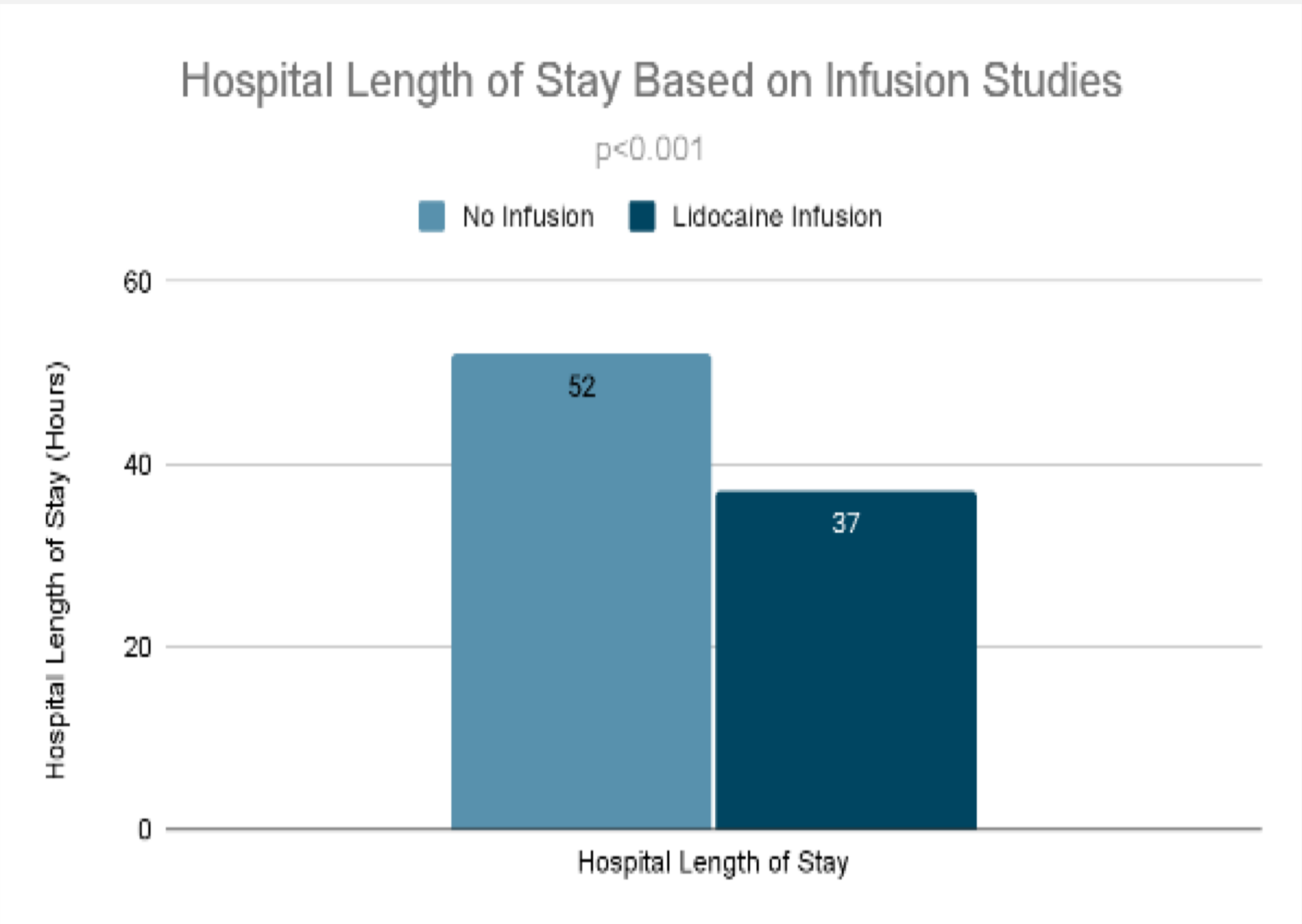


Figure 1b. LOS in patients who underwent sleeve gastrectomy

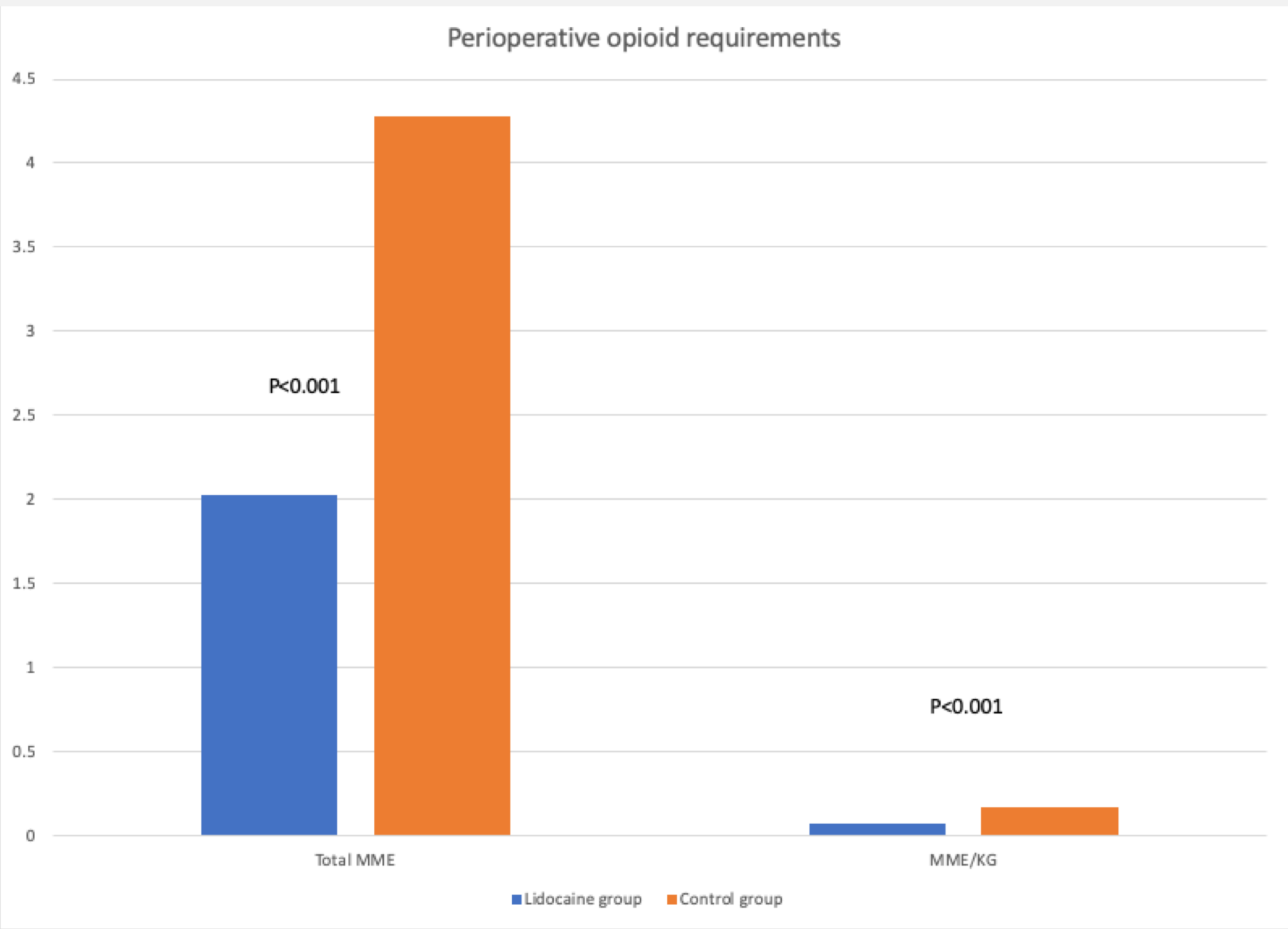


Figure 2. Perioperative opioid requirements in patient who underwent surgery for supracondylar repair

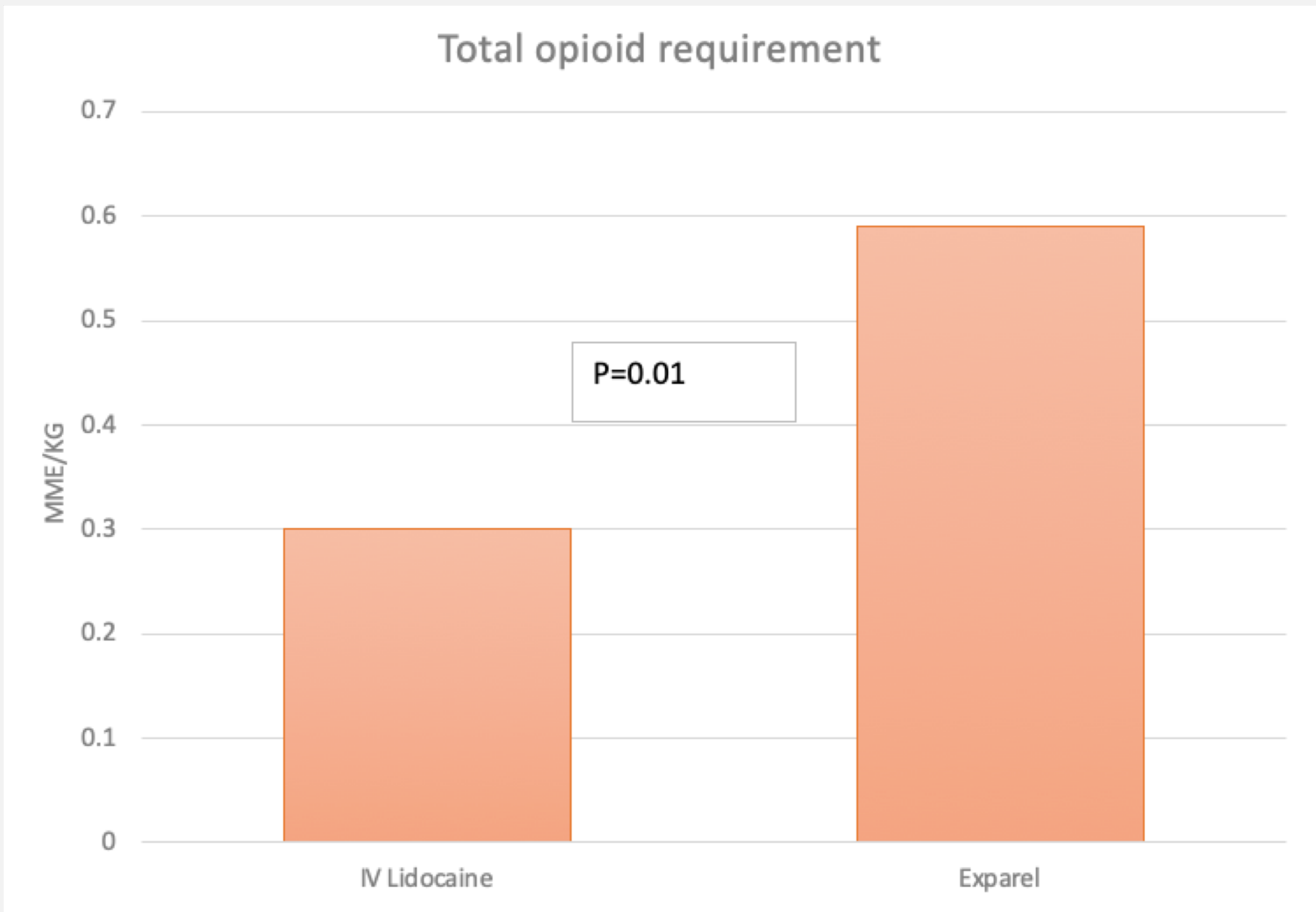


Figure 3. Total opioid require in patients with adolescent idiopathic scoliosis who underwent posterior spinal fusion

Discussion

- IVLI have been shown to be an effective adjunct with good safety profile in a multimodal pain regimen during the perioperative period.
- The incorporation of IVLI in perioperative guidelines at our institution have shown promising results of safety and efficacy in pediatric patients undergoing specific surgeries.
- Further studies with larger cohorts are needed to assess the true efficacy of these infusions at decreasing perioperative opioid requirements but the preliminary results are promising.

References:

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