

Effects of intrathecal morphine in primary THA under combined spinal anesthesia and Quadratus Lumborum (QL) block

Kevin O’Keefe MD¹, Jacelyn Lever MD/PhD¹, Hari Kalagara MD², Joel Feinstein MD¹, Andrew Braun MD¹, Promil Kukreja MD/PhD¹

Introduction

- Intrathecal morphine has been shown to provide superior post-operative analgesia in patients undergoing surgery under spinal anesthesia combined with peripheral nerve blockade^{1,2}
- QL block has been shown to provide improved analgesia in patients undergoing primary THA under spinal anesthesia when compared to spinal anesthesia alone²
- No previous study evaluating intrathecal morphine in patients undergoing THA under spinal anesthesia with QL block
- **Our Goal:** assess if the addition of intrathecal morphine to spinal+QL block can provide adequate or even superior post op analgesia compared to spinal+QL and spinal alone in patients undergoing primary THA

Methodology

26 patients undergoing primary THA under combination spinal anesthesia and QL block were given 100 mcg of intrathecal morphine.

Parameters evaluated:

- PACU and 24 hour VAS
- Time to first opioid use
- 24/48 hour total opioid use (in OME)
- 24 hour ambulation distance
- Time from block placement to hospital discharge

The results were compared to patients undergoing primary THA under spinal anesthesia with QL block (no intrathecal morphine) and compared to patients undergoing primary THA under spinal anesthesia only.

Cohorts:

26 patients - ITM/spinal/QL block
31 patients - spinal/QL block
28 patients - spinal only (control)

Results

ITM/spinal/QL block vs spinal only:

- 20.8 less OME over 24 hr (p=.0025)
- 20.5 hrs longer to 1st opioid use (p=.0052)
- 2.42 lower 24h VAS (p=.0012)
- 16 hr faster time to discharge (p=.0459)

ITM/spinal/QL block vs QL/spinal:

- 19.4 hr faster time to discharge (p=.0068)

Of note: while no statistically significant difference in time to 1st opioid use between spinal and QL/spinal groups, a difference became significant comparing the spinal to the ITM/QL/spinal group (20.51 hrs later, p value .0052).

No significant difference in either of the 3 groups in ambulation distance at 24 hours, PACU VAS, or 48 hour total opioid use.

Conclusion

Preliminary data indicate the addition of intrathecal morphine in patients undergoing primary THA under spinal anesthesia with QL block does show faster time to discharge compared to spinal/QL block alone. Additionally, intrathecal morphine in patients undergoing primary THA under spinal anesthesia with QL block shows longer time to 1st opioid use and faster time to discharge when compared to spinal anesthesia alone.

References:

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Affiliations:

1. UAB Department of Anesthesiology and Perioperative Medicine
2. Mayo Clinic Jacksonville Department of Anesthesiology

