

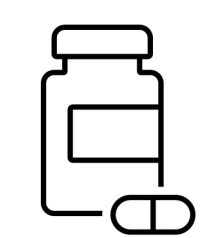
Rebound Pain In Opioid-Tolerant Patients Following Peripheral Nerve Blockade For Ambulatory Surgery: A Retrospective Cohort Study

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Retrospective Cohort Study

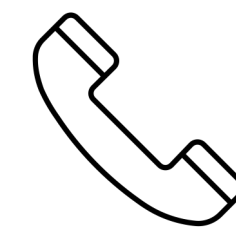
QEII Health Sciences Center, Halifax, Canada



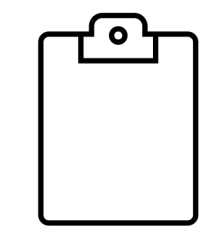
Group 1: 47 opioid tolerant patients
>60mg morphine/d or on methadone, buprenorphine or fentanyl patch
Group 2: 3553 non-tolerant patients



Undergoing ambulatory surgery with single shot
peripheral nerve block (with or without GA)



Phone questionnaire follow up at 24 hours for pain
scores (numerical rating scale, NRS) and satisfaction scores
(Likert 1-5)



Review of hospital medical record data base for pain
in PACU and return to hospital after discharge rates

Incidence of Rebound Pain

○ No significant difference

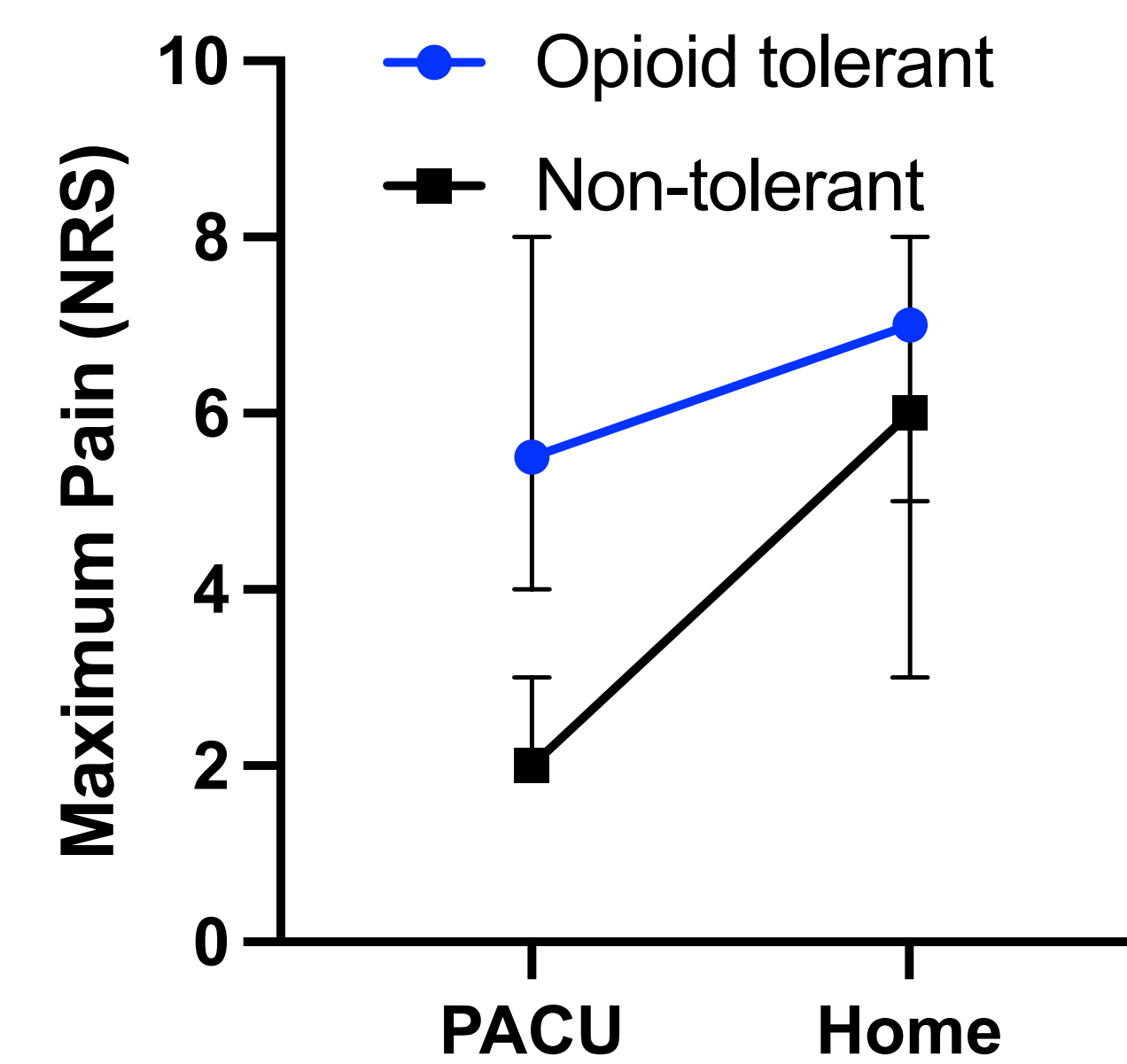


14% opioid tolerant vs 29% non-tolerant patients had
rebound pain
OR 0.44 (95% CI 0.18-1.10)

Rebound pain defined as transition of well controlled
pain (NRS ≤ 3 to ≥ 7) within 24hr of block
performance¹

Rebound Pain Score (RPS)

↓ For opioid tolerant



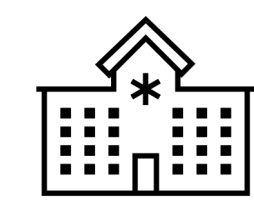
RPS defined as maximum
home pain – PACU pain.

Opioid tolerant patients
had reduced RPS owing to
similar home pain but
elevated PACU pain

Median difference of 2,
p= 0.004

Return to Hospital After Discharge

↑ Opioid tolerant more likely to return



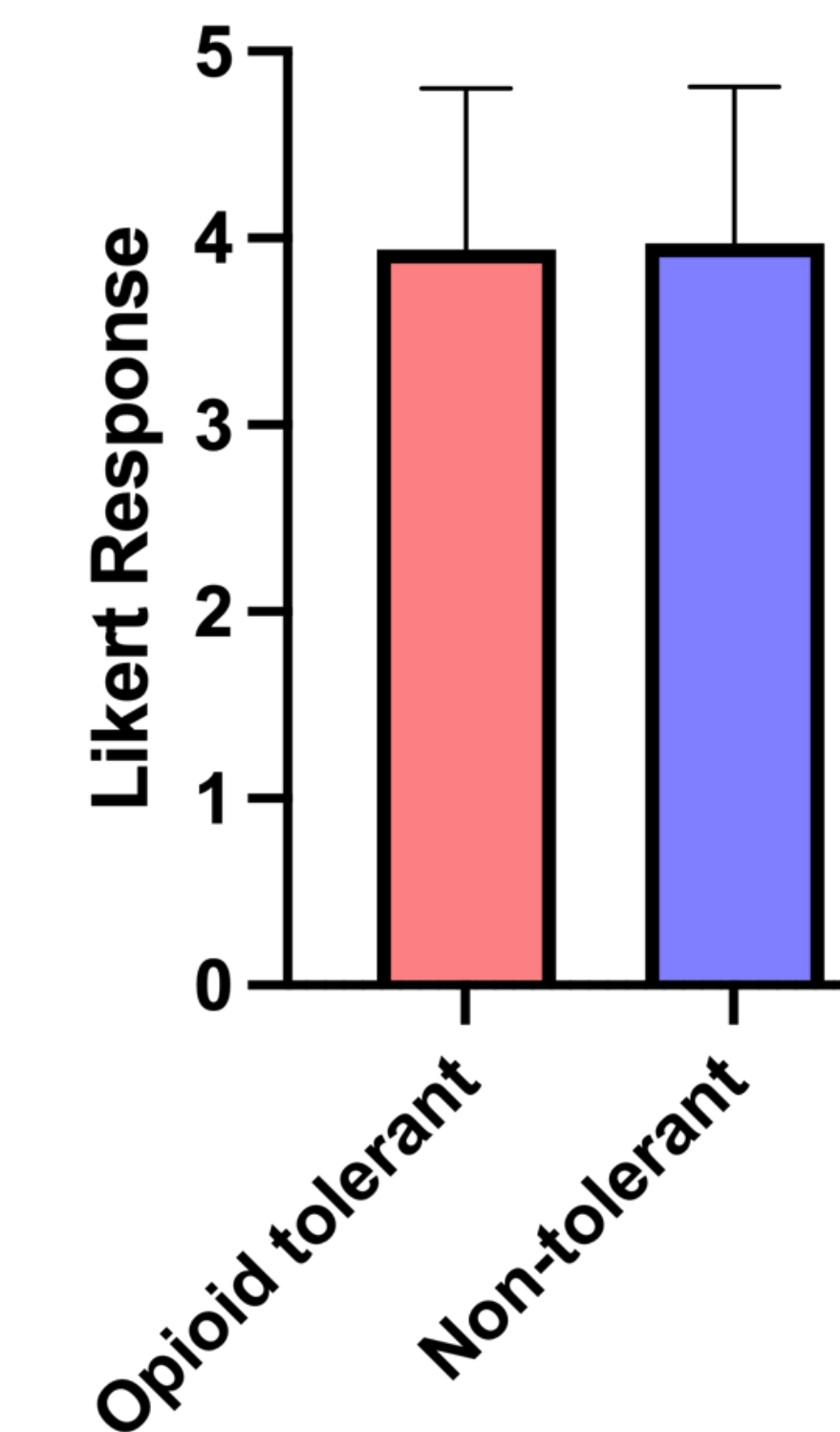
12% opioid tolerant vs 3% non-tolerant patients
returned to the hospital after discharge
OR 4.68 (95% CI 1.73 – 13.40)

References

1. Barry GS, Bailey JG, Sardinha J, Brousseau P, Uppal V. Factors associated with rebound pain after peripheral nerve block for ambulatory surgery. *Br J Anaesth* 2021;126:862-871.

Satisfaction

○ No significant difference



Nearly identical reported satisfaction
scores (Likert 1-5) between groups
despite differences in RPS and return
to hospital rates

Conclusions

- Opioid tolerant patients reported similar pain at home and satisfaction as non-tolerant patients following single shot nerve blocks for ambulatory surgery
- Rebound pain scores were reduced in opioid tolerant patients but there was no significant difference in incidence of rebound pain
- Opioid tolerant patients were more likely to return to hospital after discharge