

Activity level and patient outcome 1 after liver surgery, a prospective study

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Research

Keywords: Activity, mobility, pedometer, liver resection, postoperative care, steps, biometry

Posted Date: April 1st, 2021

DOI: <https://doi.org/10.21203/rs.3.rs-353223/v1>

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Abstract

Background: Perioperative measurement to enhance recovery after surgery has been introduced as a prognostic factor. The effect of surgery on activity level during and after hospital discharge has been relatively under-explored. The present study aims to measure perioperative activity for patients undergoing liver surgery as a benchmark for further interventional studies on the relationship between postoperative mobilization and outcome.

Methods: In this prospective cohort study we measured activity levels for patients selected for liver surgery at a single liver surgical center. The activity level was measured before, during hospital admission, and after discharge with patients wearing pedometers. Clinical parameters and outcomes were documented.

Results: Thirty-three patients were included. Median activity level was 4303 (2381- 6912), 293 (170-665), and 1250 (613-3300) steps per day preoperatively, perioperatively, and postoperatively after discharge, respectively. The activity level decreased to 38 (22-62) % after discharge compared to preoperative levels.

Conclusion: This study quantified the decrease in activity level after liver surgery. Future studies could further evaluate the intervention effect of perioperative care on postoperative outcome measures.

Full Text

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Figures

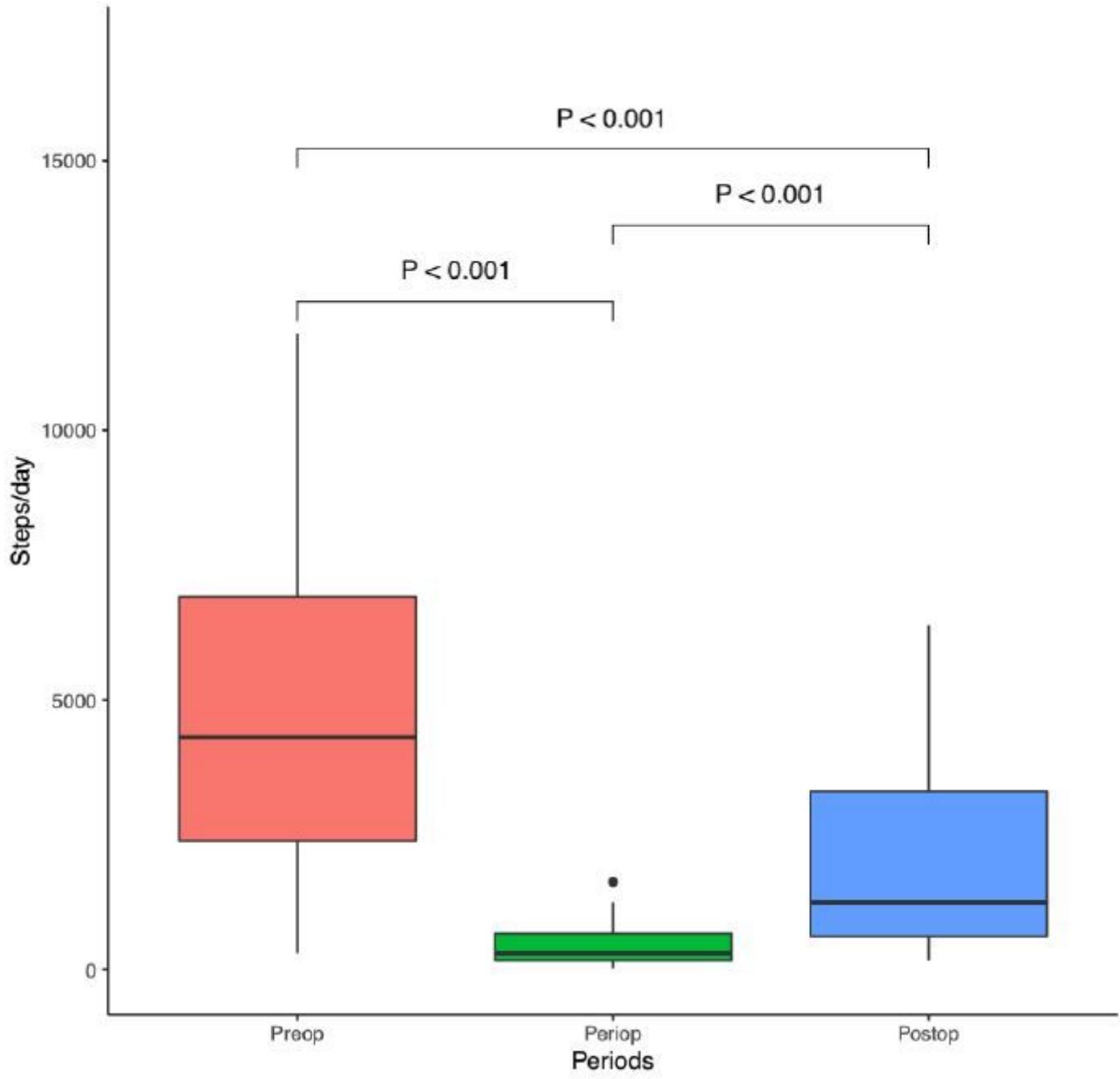


Figure 1

Steps per day preoperatively, perioperatively during hospital admission, 242 and postoperatively, after discharge from hospital.

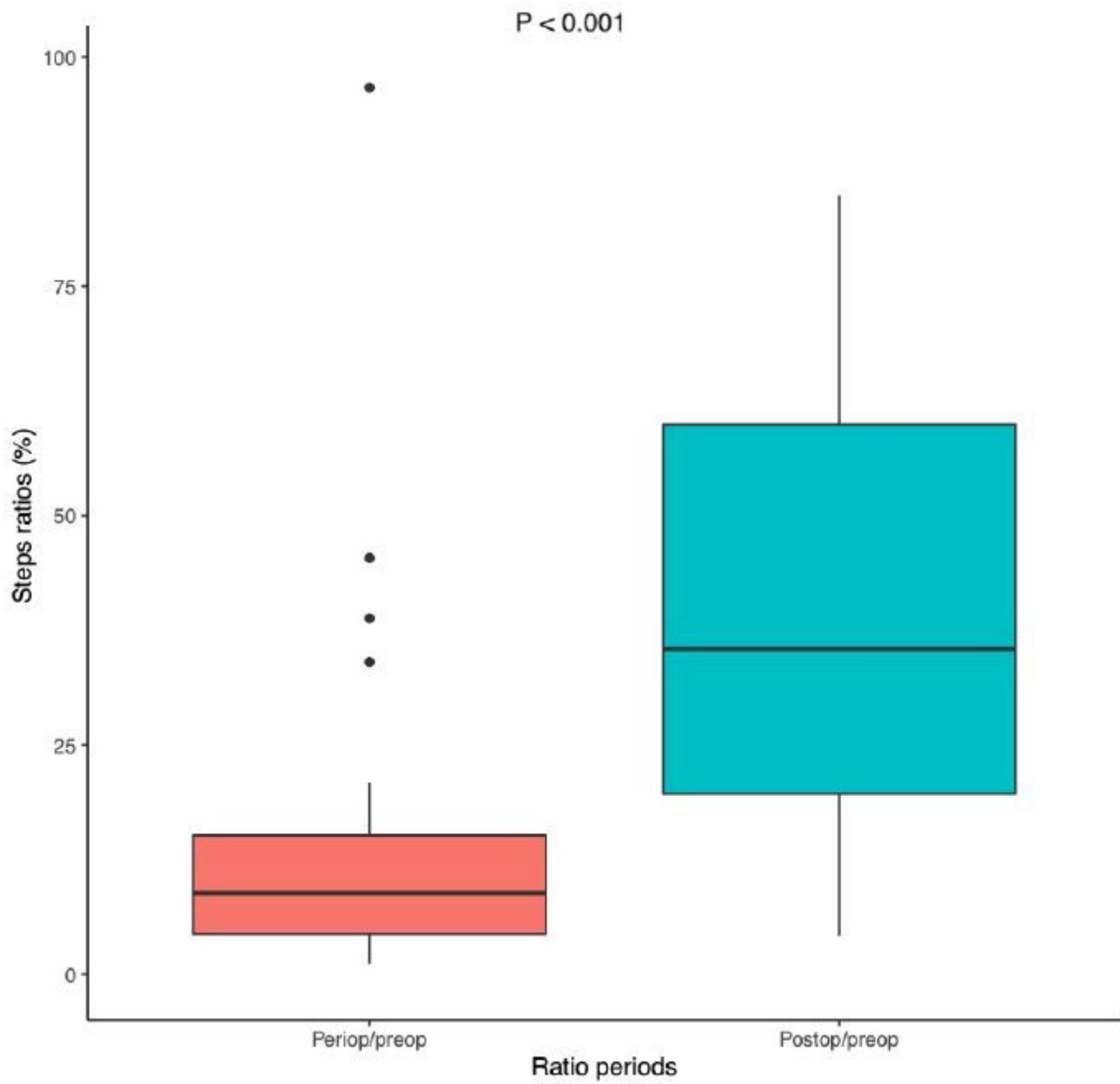


Figure 2

The ratio of perioperative divided by preoperative steps, and postoperative divided by preoperative steps

Supplementary Files

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