

Is the Second THA Easier? Evaluation of Postoperative Pain and Outcomes in Patients Undergoing Staged Bilateral THA Within Two Years

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INTRODUCTION: As primary total hip arthroplasty (THA) volumes rise, more patients with bilateral disease are undergoing staged bilateral procedures, yet comparative data on pain and opioid utilization remain limited. We analyzed perioperative opioid use, pain scores, length of stay (LOS) and functional recovery after the first and second THA performed within two years and examined whether the intersurgery interval altered these outcomes.

METHODS: We retrospectively reviewed 1,051 patients (60.5% female, mean age 63 years, mean BMI 32.7) who underwent staged bilateral THAs from 2016-2022. Patients with preoperative opioid/benzodiazepine use, concurrent orthopedic procedures within 90 days of either surgery, or discharge to rehabilitation were excluded. Demographics, LOS, opioid consumption in morphine milligram equivalents (MME), NRS Pain, and HOOS JR scores were collected.

RESULTS: For the first THA, median 24-48 hour inpatient MME was 37.5, cumulative stay 105, and LOS 57 hours. Values for the second THA were lower, 30 MME, 97.5 MME, and 50 hours (all $p < 0.01$), whereas 0-24 hour MME ($p = 0.41$) and mean in hospital NRS pain ($p = 0.39$) were non-different. Initial discharge prescription was lower after the second hip ($p < 0.01$), yet cumulative MME to 90 days rose (173 vs 137; $p = 0.03$). Baseline HOOS-JR was higher before the second THA (55.6 vs 49.4; $p < 0.01$), but the gain was smaller over 6 weeks ($\Delta 24.3$ vs 18.3 ; $p < 0.01$) with a lower 6-week HOOS JR score in the second THA (75.6 vs 73.7; $p = 0.01$). The intersurgery interval showed no correlation with LOS, opioid use, or functional outcomes in the second THA.

DISCUSSION AND CONCLUSION: In patients undergoing staged bilateral THA, there was statistically significant but unlikely clinically relevant difference in early opioid consumption with non-different pain scores. The improvement in earlier PROMs was lower, mostly secondary to a higher preoperative starting point. A second THA may be slightly "easier," but minimally, if at all.