Paper #21

Cluster-Randomized Trial of Opiate-Sparing Analgesia After Discharge from Elective Hip Surgery

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Introduction: Orthopedic surgeons have relied heavily on opiates after total hip replacement (THR) despite no clear evidence of benefit and a rapidly growing abuse epidemic. Multimodal analgesia may reduce or even obviate the need for opiates after elective surgery.

Methods: In a cluster-randomized, crossover trial, 235 patients undergoing THR were assigned to receive multimodal analgesia with minimal opiates (Group A-10 tablets), multimodal analgesia with a full opiate supply (Group B-60 tablets), or a traditional opiate regimen without multimodal analgesia (Group C-60 tablets). The multimodal regimen comprised scheduled-dose acetaminophen, meloxicam, and gabapentin. Primary outcomes were daily pain and opiate utilization for the first 30-days. Secondary outcomes included assessments of satisfaction, sleep-quality, opiate-related symptoms, hip function, and adverse events.

Results: Daily pain was significantly lower in both multimodal groups, Group A (Coeff -0.81, $p=0.003$) and Group B (Coeff -0.61, $p=0.021$). While daily utilization and duration of opiate use was lower for both Group A (Coeff -0.77, $p<0.001$) and Group B (Coeff -0.30, $p=0.04$) compared with Group C, opiate use was also lower for Group A than Group B (Coeff -0.46, $p=0.002$). There were significantly fewer opiate-related symptoms in Group A compared to Group C ($p=0.005$), but Group B and C didn't differ ($p=0.13$). Additionally, both multimodal regimens improved satisfaction and sleep, and there was no difference in hip function or adverse events.

Conclusions: A multimodal analgesic regimen with minimal opiates improved pain control while significantly decreasing opiate utilization and opiate-related adverse effects. It's time to rethink traditional opiate prescription after elective surgery.