Femoral Nerve Block In A Representative Sample Of Elderly People With Hip Fracture: A Randomised Controlled Trial


BACKGROUND: Frail elderly patients with multiple comorbidities are at particular risk for hip fractures. The use of opioids for pain control in these patients is difficult to titrate and can be associated with substantial adverse effects.

METHODS: In this Swedish study, 266 patients aged 70 or older (mean age 84, 64% female), including those with dementia, presenting with a hip fracture were randomized to a preoperative femoral nerve block (n=129) or conventional pain management (n=137). If needed, opioids were available for both groups. The primary outcomes of interest were preoperative pain ratings on a 10-cm visual analog scale (VAS) at 2, 6, and 12 hours after admission compared with baseline, as measured by the patient when possible or by nurse assessment as a proxy.

RESULTS: Fractures were equally likely to be cervical (51.9%) and trochanteric (48.1%). Nearly half (45%) of the patients had dementia. Among self-rating patients, median pain scores were 3 in both groups at baseline, 2 in the intervention group vs. 3 in controls at two hours, 2 in both groups at six hours, and 2 vs. 3 at twelve hours. Proxy-rated scores exhibited a similar pattern. Opioid use in the ambulance or emergency department did not differ between groups, but opioid use preoperatively on the ward was lower in the intervention group (39.4% versus 83.4%; p<0.001).

CONCLUSIONS: Femoral nerve block was effective in relieving pain in these elderly hip fracture patients, including those with dementia, and was associated with a decrease in the use of opioids.

38 references (anna.unneby@umu.se – no reprints)

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EDITOR’S COMMENTARY: This small randomized controlled trial from Sweden looked at 266 elderly patients with hip fractures and the effect of preoperative femoral nerve block vs. conventional pain medications on their preoperative pain scores. Patients in the femoral nerve block group had statistically significant improvements in their pain scores at 2, 6, and 12 hours post-admission and decreased opioid requirements when compared to the conventional pain control group. Interestingly, the baseline pain scores for both groups were low at 3/10 on their visual analog scores (VAS). This trial was unique in that most previous trials had excluded patients with dementia while almost half of the patients included in this trial had dementia.