Ketorolac Decreases Post-operative Pain and Opioid Consumption After Ankle Fracture Surgery

Non-steroidal anti-inflammatory drugs (NSAIDs) can be a powerful adjunct in managing post-operative pain and can help control opioid usage.

How does Ketorolac—an NSAID—affect post-operative pain, opioid intake, and fracture healing?

Ketorolac: an NSAID with analgesic activity and lower chance of inhibitory healing effects

Without ketorolac

With ketorolac

128 patients with ankle fracture

106 patients completed all seven post-operative surveys

42% Men (N=44)

58% Women (N=62)

Mean age - 48 years

Ketorolac + Opioid group

N=56

Days 1-7

Ankle fracture fixation

19 opioid pills*

*Tablets of 5/325 oxycodone-acetaminophen

Opioid consumption was reduced in the patients randomized to ketorolac

Patients with ketorolac had less pain

All fractures in both groups healed by 12 weeks, but study was underpowered to detect differences in healing and side effects

Adding ketorolac to the analgesic regimen after ankle fracture surgery reduced the use of opioid medication and pain by a modest amount, but larger studies will need to evaluate whether it has adverse effects on bone healing.