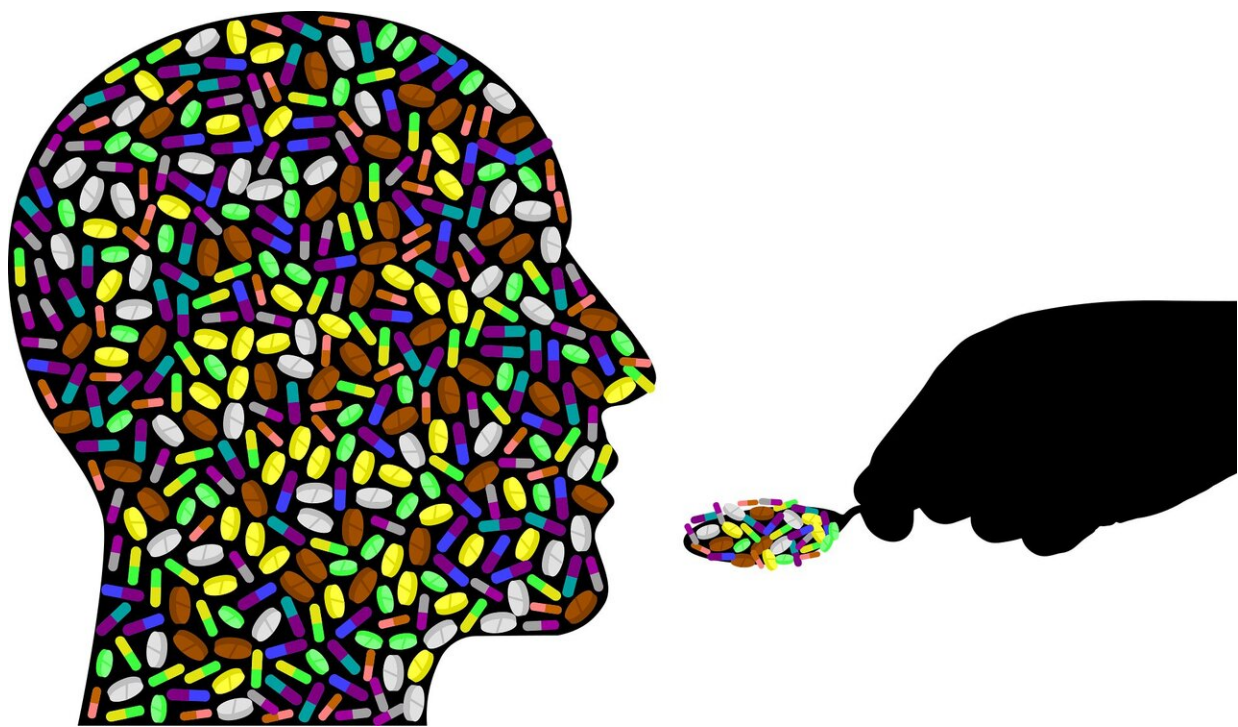


# Examining the effect of prescribing patterns on utilization of opioid medication in ACL reconstruction

July 14 2022

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Prescribing smaller quantities of opioid medication appears to be as effective in controlling postoperative pain after knee surgery as higher quantities and may help to limit the number of opioids prescribed and possible diversion of unused prescription opioid medication, according

to research presented today at the American Orthopaedic Society of Sports Medicine 2022 Annual Meeting

"During the 21st century, opioid medication prescription and consumption has increased, which has led to an increase in [opioid abuse](#), dependence, and fatal overdoses. Health care providers, particularly surgeons, have recently focused on decreasing the number of opioids prescribed, as overprescribing is a known cause contributing to the [opioid epidemic](#)," said Emma E. Johnson, from Rothmann Orthopaedics in Philadelphia.

Johnson and colleagues created a prospective, randomized trial with 135 patients who underwent primary anterior cruciate ligament reconstruction following an ACL tear. Patients were randomly assigned to one of three prescription groups pre-operatively: 15 [tablets](#) (41 patients), 25 tablets (40 patients), or 35 tablets (49 patients) of oxycodone-5mg. Standard of care nerve blocks was utilized in all patients in addition to general anesthesia for the surgical procedure.

"The purpose of this randomized, prospective trial was to evaluate the effects of different quantities of prescribed opioid tablets on opioid utilization by patients, post operative pain, and [patient satisfaction](#) following ACL reconstruction," Johnson reported.

Patients were instructed to take acetaminophen and NSAIDs as needed with the opioid medication to be used for "breakthrough" pain. Patients in all three groups were asked to complete pain and medication logs twice daily for the first 14 days post-operatively, along with an opioid medication satisfaction survey at two weeks, and IKDC questionnaires before surgery and up to 6 months postoperatively.

There were no significant differences between the two groups in mean age at surgery (33.6 vs. 31.6 vs 33.3; P=0.328), BMI (27.7 vs 26.1 vs

25.7;  $P=0.525$ ), or sex ratio (24M/17F, 20M/19F, 25M/24F;  $P=0.735$ ). There were also no significant preoperative differences in subjective pain and function. There were no significant differences in mean total morphine milligram equivalents (MME) consumed between the three groups (72.3 in the 15-tablet group, 61.9 in the 25-tablet group, 78.1 in the 35-tablet group;  $P>0.05$ ). There was a significant difference between those who received 15 tablets and those who received 25 and 35 tablets when asked if they thought they were prescribed too few/too many narcotics, with a greater percentage of the 15-tablet group reporting that they felt they received too few at 20.6%, ( $P=0.05$ ).

Johnson and her research colleagues found no significant difference between the three groups on subjective morning or afternoon pain for the first 14 days after surgery, total opioid pills consumed, patient satisfaction with the ability of the narcotic to treat their condition, patient satisfaction with the amount of pain relief they experienced since surgery, or patient satisfaction regarding the number of narcotics initially prescribed after surgery.

Finally, there was no difference between the three groups in postoperative function at 2 weeks, 6 weeks, 3 months, and 6 months, as measured by IKDC scores. Despite a significantly larger portion of the group who received 15 oxycodone tablets reporting that they felt they received too few opioid tablets, there was no difference between those who received 15, 25, or 35 oxycodone-5mg tablets in reported pain levels, opioid consumption, or any satisfaction metrics.

"Given these results, giving lower quantities of opioid medication appears to be as effective in appropriately controlling post-operative [pain](#) as higher quantities, and may help to limit the number of opioids prescribed and possible diversion of unused prescription [opioid medication](#)," Johnson concluded.

**More information:** Conference: [am2022.sportsmed.org/am2022](https://am2022.sportsmed.org/am2022)

Provided by American Orthopaedic Society for Sports Medicine

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<https://medicalxpress.com/news/2022-07-effect-patterns-opioid-medication-acl.html>

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