

# Opioid Use Before Hip or Knee Surgery Can Mean Trouble



“Doc, I know I need to do the surgery, but can you give me some oxycodone for pain until then? I’ll stop once I have the surgery.” This is a common conversation in the office of a joint replacement surgeon. In the past, narcotic medication, commonly known as opioids, were given by physicians hoping to alleviate their patients’ pain and suffering. Unfortunately, we have learned that these medications may do more harm than good.

**Opioids are powerful prescription pain-reducing medications that have benefits and potentially serious risks.** Common opioid medications prescribed include oxycodone, hydrocodone, morphine, Norco (acetaminophen/hydrocodone), Vicodin (acetaminophen/hydrocodone), Percocet (acetaminophen/oxycodone), hydromorphone (Dilaudid), and tramadol.

Overuse of opioids has become an epidemic in the United States. According to the Centers for Disease Control and Prevention, “From 1999 to 2017, almost 218,000 people died in the United States from overdoses related to prescription opioids. Overdose deaths involving prescription opioids were five times higher in 2017 than in 1999” (<http://wonder.cdc.gov>). Many states have now adopted new laws that limit opioid prescriptions.

Could short-term use of these opioids in weeks or months prior to total hip arthroplasty (THA) or total knee arthroplasty (TKA) still be considered safe? According to multiple studies, **the answer is NO**. While easing symptoms of pain, use of opioids has negative, long-term consequences such as developing tolerance, drug dependence and hyperalgesia - a condition in which sensitivity to pain increases as a result of taking opioids.

If you suffer from arthritis pain, multiple strategies other than using opioids can be employed for pain control before surgery is necessary. Read this article about how to relieve hip and knee pain without surgery: <https://hipknee.aahks.org/relieving-hip-and-knee-pain-without-surgery>. Potential therapies include nonsteroidal anti-inflammatories (NSAIDs), injections, weight loss, and physical therapy. **If these non-operative methods eventually stop working, pain can become severe enough to warrant surgery.** Pain in the time between deciding to move forward with surgery and actually having surgery can be difficult to endure. But one thing is clear: **opioids are not a viable treatment option for the vast majority of patients.**

Multiple studies show that people who use opioids prior to THA and TKA have **worse** outcomes after surgery. Additional studies have shown that they also have **more difficulty with pain control after surgery** and are at **increased risk for readmission** to the hospital, **infection**, and **revision surgery**. In addition, patients who take opioids prior to THA and TKA have a **more difficult time discontinuing** them after surgery. Studies show that people who **do not use opioids** prior to surgery are less likely to need opioids in the months after surgery and will have a better outcome after surgery. It is important to discuss this subject with your physician and work together as a team to develop an opioid-free plan that works best for you.

AAHKS has written a position on prescribing opioids for arthritis pain and advises that **opioids should be avoided and reserved for only exceptional circumstances**. Read the statement.

[<http://www.aahks.org/position-statements/opioid-use-for-the-treatment-of-osteoarthritis-of-the-hip-and-knee/>]



## References

The articles reviewed below discuss in more detail the effects of opioid usage prior to THA and TKA.

### **Preoperative Opiate Use Independently Predicts Narcotic Consumption and Complications after Total Joint Arthroplasty.**

**Authors:** Joshua C. Rozell, MD, Paul M. Courtney, MD, Jonathan R. Dattilo, MD, Chia H. Wu, MD, MBA, Gwo-Chin Lee, MD.

**Journal of Arthroplasty, 2017;32: 2658-62.**

This study aimed to determine the impact of preoperative narcotic use on length of stay and in-hospital complications after THA and TKA. The authors evaluated 802 patients undergoing elective THA or TKA over a nine-month period. Analysis of these patients demonstrated that **the more you use before surgery, the more you are likely to use after surgery**. Additionally, patients who used opioids prior to surgery were nearly **two times more likely to develop complications** during their hospital stay and were likely to spend more time in the hospital. Patients using opioids prior to surgery were two and a half times more likely to be using them three months after surgery. **The authors concluded that patients using opioids prior to surgery require more opioid pain medication after surgery and were at a higher risk of sustaining complications after surgery.**

### **Trends and Predictors of opioid use after total knee and total hip arthroplasty.**

**Authors:** Jenna Goesling, Stephanie E. Moser, Bilal Zaidi, Afton L. Hassett, Paul Hilliard, Brian Halstrom, Daniel J. Claw, Chad M. Brummett.

**Pain, 2016; 157: 1259-65.**

The authors aimed to determine trends of opioid usage after THA and TKA. They asked 574 patients to complete questionnaires related to pain and function for six months after their surgeries. Among patients who did not use opioids prior to surgery, 4.3% of THA and 8.2% of TKA patients were using opioids at six months. Among patients who used opioids prior to surgery, 34.7% of THA and 53.5% of TKA patients continued to use opioid medications after surgery. **This reaffirms the prior article's notion that if you use opioids prior to surgery, you are more likely to continue to use them after a hip or knee replacement.**

### **Chronic Opioid Use Prior to Total Knee Arthroplasty.**

**Michael G. Zywiell, MD, D. Alex Stroh, Bs, Seung Young Lee, MD, Peter M. Bonutti, MD, Michael A. Mont, MD.**

**Journal of Bone and Joint Surgery, 2011; 93: 1988-93.**

The authors took 49 patients who had regularly used opioids for pain control prior to TKA and compared them to a group of patients who did not use opioids. They studied length of hospitalization, complications requiring reoperation, referrals to pain management, and clinical outcomes.



	Opioid Group	Non-Opioid Group
Outcomes scores	Lower	Higher
Arthroscopic evaluations for unexplained pain	5	0
Revision surgeries	8	0
Referrals for outpatient pain management	10	1
Average length of stay	4.3 days	3.4 days

**The authors recommended non-opioid medications be used prior to surgery to improve outcomes and avoid complications, especially repeat surgeries.**

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