

Researchers look at steroids as pain control alternative to opioids

December 6 2022



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Results from a study by Henry Ford Health orthopedic researchers is the latest of several high-powered studies geared toward effectively managing pain and decreasing opioids use after total knee replacement



surgery.

This latest study is a double-blind, randomized, placebo-controlled trial that examined whether oral dexamethasone, a cortisone-like medicine or steroid, can reduce pain following total knee arthroplasty (TKA) beyond a single preoperative dose.

The trial investigated the postoperative effects and safety of oral dexamethasone as a potential augment to multimodal use in outpatient knee replacement.

"When it comes to supporting our same-day joint replacement patients at ambulatory surgical centers, our research focus has been how to properly manage pain when they go home in order to reduce the use of opioids as well as unnecessary emergency department visits," said Jonathan Shaw, M.D., chief resident for the Department of Orthopedic Surgery at Henry Ford Health and the study's lead investigator.

Previous research shows that intravenous dexamethasone following joint replacement surgery reduces pain and the need for opioid use. The focus of this study was to measure the effectiveness of additional dexamethasone taken in a pill form for several days after going home from outpatient surgery.

"What we found is that while on the oral steroid patients reported less pain after surgery as part of their multi-modal regimen," said Dr. Shaw.

The research team also looked at complications from giving patients steroids after a total knee replacement. Within this recruited population, there was no increase in reported difficulty sleeping, surgical healing, or infection.

"This translational research is founded on what we know helps nausea



prevention after chemotherapy during some cancer treatments and adds to the pain-relieving properties we utilize after joint surgery to potentially help with the initial recovery period," said Jason Davis, MD., an <u>orthopedic surgeon</u> at Henry Ford Health and the study's senior author.

The novel study was recently presented at the American Association of Hip and Knee Surgeons (AAHKS) <u>annual meeting</u> and received the 2022 AAHKS Clinical Research Award.

This award is given in recognition of an outstanding clinical paper in the field of hip and knee arthroplasty. It was chosen from the 1,800 clinical research abstracts submitted for presentation; just 54 were chosen for podiums at the association's annual international conference held in Dallas, Texas in November. The study is planned for publication in the *Journal of Arthroplasty* in 2023.

"The Department of Orthopedic Surgery is one of the specialties at Henry Ford that has truly adopted the multi-modal pain control model which applies different modes of pain control medication to manage patients' pain and decrease opioid use," said Dr. Shaw.

More information: Study Abstract: <u>www.aahks.org/wp-content/uploa</u> ... calResearchAward.pdf

Conference: meeting.aahks.org/

Provided by Henry Ford Health

Citation: Researchers look at steroids as pain control alternative to opioids (2022, December 6) retrieved 12 May 2023 from <u>https://medicalxpress.com/news/2022-12-steroids-pain-alternative-</u>



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