An Observational Study on Intra-Articular Knee Injection Preparations of Louisiana Orthopaedic Surgeons

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Abstract

Background: Intra-articular corticosteroid injections (IACI) are a common treatment used by orthopaedic surgeons for the management of arthritic knee pain. Our survey’s purpose was to observe if there were particular components of an IACI that were used more frequently than others since there is currently no standardization for an IACI.
**Methods:** The survey was administered to 272 orthopaedic surgeons in the state of Louisiana via SurveyMonkey. Data was received and analyzed using statistical methods.

**Results:** There was a 22% response rate (60 of 272 surveys). The most commonly used steroid was triamcinolone (56%). The most commonly used local anesthetic was lidocaine (57%). 27% percent of the respondents used the combination of triamcinolone and lidocaine in their preparation, making it the most common combination. 93% percent of responding surgeons used a 1.5 inch needle, and fifty three percent used a 22 gauge needle.

**Conclusions:** Our evidence supports that triamcinolone and lidocaine are the most prevalent steroid and anesthetic components, respectively, amongst surgeons in Louisiana. The combination of the two is the most commonly used combination amongst surgeons in Louisiana.

**Significance:** Although an IACI is a very common procedure, there is currently no standard for the specific components of the drug cocktail and little literature on the frequency of the use of these components in said cocktails. This study is unique because there no previous studies examine physician behavior or trends on such a common procedure, and there is a need for standardization based on evidence based medicine. Such standardization has the potential to improve quality of care and reduce spending.

**Level of Evidence:**

This survey is a level IV decision model study designed to identify patterns of use of particular pharmaceutical components.