UVA Resident Research Day 2019

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Title

Retrospective review of corticosteroid injections prior to thumb carpometacarpal arthroplasty

Background

Thumb carpometacarpal osteoarthritis (CMC OA) is a common condition causing significant disability. It affects up to 11% and 33% of men and women in their 50s and 60s, respectively. Thumb CMC OA leads to pain, laxity and weakness of the joint. Based on the staging of the CMC OA, different forms of treatment can be used, including both conservative and surgical measures.

Purpose

The aim of this study is to ascertain whether an intra-articular corticosteroid injection leads to pain relief and increased function and what is the duration and magnitude of this effect.

Methods

A single-institution database was queried for patients with thumb CMC OA who was diagnosed clinically and radiographically. These patients underwent corticosteroid injection at least one time prior to CMC arthroplasty. Multivariate binomial logistic regression analysis was used to compare groups while controlling for demographic confounders and adjusted odds ratios (OR) and 95% confidence intervals were calculated, with p < 0.05 considered significant.

Results/Conclusion

There are potentially significant although short-term benefits to be gained from steroid injections into the thumb CMC joint. They can lead to pain relief and improved function, certainly in the first 1 to 3 months post-injection. Steroid injections are a low-risk procedure and are helpful in delaying or avoiding the need for surgery.