

Intra-articular Corticosteroid Injections are Cost-Ineffective in Patients that Undergo Total Hip Arthroplasty

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INTRODUCTION: Despite their limited efficacy, intra-articular corticosteroid injections (IACSI) are a popular management option in patients with hip osteoarthritis (OA). Alternatively, total hip arthroplasty (THA) is a cost-efficient procedure that has excellent outcomes in patients with moderate-to-severe hip OA. The purpose of this study was to determine the utility and cost-effectiveness of preoperative IACSI in hip OA patients that subsequently underwent THA.

METHODS: 2,660 patients who received one to three IACSI for the management of hip OA were identified. A cohort of 7,122 patients undergoing THA during the same time period without any IACSI history served as a control group. Data on patient demographics, number of IACSI received, and patient reported outcomes (PROs) was collected. Cost analysis included injection reimbursements as well as the reimbursements of office visits and nonoperative treatments in the year prior to THA.

RESULTS:

Of the 2,660 patients that underwent IACSI, 854 (32.1%) patients subsequently underwent THA within 2 years following the date of their last injection. The average year-prior-to-THA cost was significantly higher in patients who received at least one IACSI (\$314 ± 220 vs. \$249 ± 161, $p < 0.001$). Multivariate regression analysis demonstrated that preoperative costs increased per number of injections; (1) \$74.28, (2) \$205.22, (3) \$261.54. There was no significant difference in average delta HOOS-JR scores when comparing patients who received IACSI to those who did not (30.1 ± 22.1 vs. 31.0 ± 20.0 , respectively, $p = 0.490$); both cohorts achieved the HOOS-JR minimal clinically important difference (MCID) at similar rates.

DISCUSSION AND CONCLUSION: Patients who received IACSI prior to THA achieved MCID at similar rates when compared to their counterparts in the no-injection group. However, patients receiving IACSI prior to surgery were found to have significantly higher preoperative costs. Future studies are needed to better understand the optimal timing for IACSI in patients with hip OA.