p < 0.001), and younger patients were more likely to receive an uncemented TKA (59.73 vs 61.45 years, p < 0.001). There was no difference in the laterality between groups (p = 0.448). Patients were more likely to receive an uncemented TKA if they were from the northeast (9.2%) or the south (9.1%) than if they were from the north central region (6.6%) or the west (5.8%, p < 0.001). Patients implanted with an uncemented TKA had a shorter average length of stay (1.89 vs 2.02 days, p < 0.001), and were more likely to be discharged home (49.7%) or home with services (44.3%, p = 0.001). Patients with private insurance were more likely to receive an uncemented TKA (83.9%) than patients who had Medicare supplemental insurance (16.1%, p < 0.001). Net total payment did not differ between cemented and uncemented TKA ($29779.65 vs $29397.64, p = 0.127), nor did the net hospital collection rate ($26352.25 vs $25920.79, p = 0.127). However, physicians were reimbursed more for uncemented TKA than for cemented TKA ($2064.39 vs $1986.16, p < 0.004). Multiple logistic regression analysis demonstrated that patients having surgery more recently (p < 0.001), younger patients (p < 0.001), male patients (p < 0.001), privately insured patients (p < 0.001), and the region that the patient was located all strongly predicted a higher chance of being implanted with an uncemented TKA. Discussion: Although 92.0% of TKAs are still cemented, there is a trend towards increasing use of uncemented TKA from 2018 to 2020. Younger patients, males, patients with private insurance, patients who underwent TKA more recently, and patients in the northeast or south were more likely to be implanted with an uncemented TKA. Uncemented TKA was associated with a shorter length of stay and were more likely to be discharged home with or without services. While there was no difference between total or hospital reimbursement between cemented and uncemented TKA, physicians were reimbursed more for uncemented TKA. It is important for surgeons to understand the trends with evolving technology.

Category: Knee - Arthroplasty

Central Sensitization and Neuropathic Pain Synergistically Affect Inferior Patients Reported Outcomes Following Total Knee Arthroplasty

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Summary: Central Sensitization and Neuropathic Pain symptom were factors related to higher postoperative pain levels and inferior PROMs in patients undergoing primary TKA.

Data: Introduction: There are still insufficient studies on the relationship between central sensitization (CS) and neuropathic pain (NP), and the effects of CS and NP on the patient-reported outcome measures (PROMs) of patients who underwent total knee arthroplasty (TKA). The purpose of this study was to investigate the relationship between CS and NP and whether CS and NP were associated with PROM in patients undergoing TKA. Methods: A total of 312 patients who underwent primary TKA for end stage knee OA were enrolled. CS was defined as a patient with a score of 40 or higher using central sensitization inventory (CSI). NP was defined as a patient with a score of 13 or more using pain detect questionnaire (PDQ). PROMs were also evaluated based on the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) score preoperatively and at postoperative 2 years. The patients were divided into 4 groups, group 1 with CS and NP positive, group 2 with only CS positive, group 3 with only NP positive, and group 4 with CS and NP negative, and PROM was compared between the groups. Results: There were 90 patients (28.5%) with both CS and NP positive, 33 patients (10.4%) with only CS positive, and 83 patients (26.3%) with only NP positive and 110 patients (34.8%) with CS and NP negative. All WOMAC subscores showed significant differences between the 4 groups before and after surgery (all p < 0.05). As a result of post hoc analysis before surgery, group 1 showed significantly inferior WOMAC pain, function, and total score compared to groups 2, 3, and 4 (all p < 0.05). Groups 2 and 3 showed worse preoperative results in WOMAC subscores compared to group 4 (all p < 0.05). These results remained the same at 2 years after surgery. Conclusion: CS and NP symptom were factors related to higher postoperative pain levels and inferior PROMs in patients undergoing primary TKA. Among them, those with both CS and NP positive showed an inferior postoperative PROM compared to only CS or NP positive, and both CS and NP negative.

Category: Knee - Arthroplasty

"Is It Gender Or Surgical Technique?" Prospective Evaluation of Femoral Component Sizing Differences

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Summary: The next generation knee system has both less overhang and underhang with its components. Introduction: In spite of gender marketing, little evidence supports that gender-based changes to the femoral component lead to better femoral component fit. Methods: Between 2009 and 2018, 2508 consecutive primary total knee replacements in females were performed comparing HKA alignment data from EOS and CT scanogram. The next generation knee system has both less overhang and underhang with its components. Discussion: While a gender-specific component may provide more sizing...