PROMIS CAT Forms Demonstrate Responsiveness in Patients Following Reverse Total Arthroplasty Across Numerous Health Domains

Sreten Franovic
Kevin A. Taylor
Noah A. Kuhlmann
Fadi Aboona
Collin Schlosser

See next page for additional authors
Authors
Sreten Franovic, Kevin A. Taylor, Noah A. Kuhlmann, Fadi Aboona, Collin Schlosser, and Stephanie J. Muh
No patient had any sign of osteoarthritis at the index radiograph. After a mean of 20 (18-22) years, 30 of these patients, with 32 shoulder images were possible to re-examine bilaterally with antero-posterior radiographs under fluoroscopic control to obtain true frontal views. Bilateral ultrasound examination of the rotator cuff was also performed. There were 19 men with 20 shoulders and 11 females with 12 shoulders.

Results: Mean age at follow-up was 56 (32-78) years. The mean difference in CSA was -1.24 (-5.5-3) degrees and the mean AI difference was -0.04 (-0.01-0.09) between the first and the second radiographs, 20 years later. Mean difference was 0.68 degrees in CSA between the study shoulder and the contralateral shoulder, AI was 0.61 bilaterally at follow-up. There was no correlation between the CSA (r=-0.02, p=0.9) or AI (r=-0.13, p=0.47) in the primary radiographs and osteoarthritis according to Samilson and Prieto at follow-up. Nor could any correlation be found between index CSA (r=0.52) or AI (r=-0.13, p=0.47) and the presence of rotator cuff tears at follow-up.

Conclusions: In this study, with strict measuring criteria, no correlation between the CSA, AI and development of glenohumeral osteoarthritis at follow-up. Intra-rater agreement was less frequent when selecting a preferred definition compared to classifying patients as pseudoparalytic based on video. Surgeons may rely less on explicit criteria and more on a conceptual framework when assigning a pseudoparalytic label. Care should be taken with use of the term pseudoparalysis in clinical outcome studies when there is clearly a lack of consensus among experts on defining this term.