Abstract:
Glenohumeral osteoarthritis is a well-documented, long-term complication of open stabilization procedures. However, there is a lack of knowledge about long-term radiographic outcome after arthroscopic Bankart procedures. Glenohumeral osteoarthritis will develop less frequently in arthroscopic Bankart repair compared with open repairs reported in the literature. Case series; Level of evidence, 4. The inclusion criteria for this study were (1) all-arthroscopic Bankart repair for a (2) symptomatic anteroinferior shoulder instability and (3) a minimum follow-up of 10 years. True anteroposterior and lateral radiographs were obtained to evaluate the prevalence and grade of osteoarthritis according to the Samilson classification. Patients were assessed by the Constant score and examined for passive external rotation deficits. Of 165 shoulders that fulfilled the inclusion criteria, 100 were available for evaluation. The median Constant score at an average±SD 156.2±18.5 months after Bankart repair was 94 (range, 46-100). Twenty-one shoulders (21%) sustained a recurrent dislocation. Overall, 31% of shoulders showed no evidence of glenohumeral osteoarthritis; 41% showed mild, 16% moderate, and 12% severe degenerative changes. Osteoarthritis
did not correlate with Constant score results ($P=.427$). The grade of osteoarthritis was significantly associated with the number of preoperative dislocations ($P=.016$), age at initial dislocation ($P=.005$) and at surgery ($P=.002$), and the number of anchors used ($P=.001$), whereas time from initial dislocation to surgery ($P=.854$) and external rotation deficit at 0° and 90° of abduction ($P=.104$ and .348, respectively) showed no significant correlation. Recurrent dislocation did not affect the presence or grade of osteoarthritis ($P=.796$ and .665, respectively). At an average 13 years after arthroscopic Bankart repair, osteoarthritic changes are a common finding and, overall, are comparable with reports in the literature regarding open procedures as well as nonoperative treatment. The extent of trauma sustained during preoperative dislocations and the age of the patient seem to be more relevant for long-term dislocation arthropathy than the kind of treatment. Accordingly, the study hypothesis must be rejected. Avoiding preoperative dislocations is more important for the prevention of osteoarthritis than short-term treatment. The number of anchors used was found to be a predictor for long-term development of osteoarthritis.