Gene R. Barrett, M.D.
Jackson, MS
Kenneth Weiss, M.D.
Jackson

Comparison of Bilateral Anterior Cruciate Ligament Reconstruction With Two Different Graft Methods (SS-07)

There has been prolonged debate regarding the best graft for anterior cruciate ligament reconstruction. Proponents of the bone-patella tendon-bone (BPB) autograft appreciate bone to bone healing in the femoral and tibial tunnels and long-term stability. Those in favor of hamstring autografts state that it causes less anterior knee pain and facilitates a faster, less painful rehabilitation as compared to BPB. We retrospectively reviewed the unique experience of six patients who had undergone reconstruction of both anterior cruciate ligaments using BPB graft on one knee and a quadruple-looped hamstring graft for the other knee. The average patient was 33.2 years of age with 4 females and 2 males. The average follow-up was 59.3 months for the BPB group and 29.5 months for the hamstring group. Overall, 5 of 6 patients (83.3%) preferred the hamstring graft. The average Lysholm score was 98.2 for the BPB group and 99.7 for the hamstring group. Kneeling pain was found in 3 patients in each group. The length of time on crutches, the length of time patients required narcotic pain medication, and the overall length of rehabilitation were all slightly shorter with the hamstring group. All patients were able to return to their preoperative level of activity. Although both groups had excellent outcomes, the results showed that patients preferred the hamstring graft for anterior cruciate ligament reconstruction.

George Branche, M.D.
Arlington, VA
Leonard Tassy, M.D.
Philadelphia, PA

Long-Term Results of Arthroscopic Resection of the Distal Clavicle (SS-08)

Introduction: Arthroscopic resection of the distal clavicle for acromioclavicular joint disease has been gaining popularity in recent years. While short-term results of this procedure have been promising, the long-term outcome using standard subacromial space portals has not been examined. Methods: Twenty patients with an average follow-up of six years (range 2.9-9) were reviewed. All were evaluated both pre and post-operatively by physical examination, radiographs and a questionnaire incorporating the UCLA and Constant scoring systems. Results: Post-operatively, all patients had pain relief and were satisfied with the result. The average post-op UCLA Shoulder Score was 29.8±0.6, compared with 17.5±3.0 before surgery (p=0.001). The Constant Shoulder Score averaged 98.5±2.1 post-op, compared to 70.6±11.2 pre-operatively (p=0.001). There was 100% good to excellent results using both scoring systems. The components of the UCLA scoring system all showed marked improvements with surgery. UCLA pain scores improved the most with a post-op average of 9.8±0.6 vs. 3.0±1.1 pre-op (p=0.001). UCLA average functional scores (10.0±0 post vs. 6.4±1.6 pre) and power scores (10.0±0 post vs. 8.0±1.6 pre) also improved (p=0.001). Constant categories of pain, activities of daily living

(ADL), range of motion (ROM), and power averaged 14.4±1.6, 19.9±0.4, 39.3±1.0, and 25.0±0 post-op vs. 4.2±2.2, 13.0±3.0, 34.0±5.1, and 18.1±6.8 pre-op, respectively. On physical exam, all patients had a non-tender, stable AC joint and 19 patients had a negative cross-arm test post-operatively, compared with 18 tender AC joints and 16 positive cross arm tests pre-op. Follow-up radiographs showed maintenance of the resected distal clavicle in 19 patients. Five patients (25%) had some regenerate bone formation from the distal clavicle, but remained asymptomatic. Patients also showed marked improvements in average ROM of the affected shoulder post-operatively. Forward elevation increased to an average of 176°±7 post-operatively compared to 151°±26 pre-op (p=0.001). Internal rotation also improved to an average thoracic level of 7.8±2.4 post-op compared to a 9.4±1.9 level pre-op (p=0.05), while external rotation improved to an average of 75°±14 post-op versus 53°±12 pre-op (p=0.001). Fifteen patients (75%) noted improved work function at follow-up, while five, who were not significantly hampered pre-op, noted no change. There was an average of 4.0±5 days of missed work. Improved athletic performance was noted in 16 (80%) patients, while four (20%) noted no significant improvement. The average time before returning to full athletic activity was 8.2±7.3 weeks. Conclusion: The long-term results of arthroscopic resection of the distal clavicle are uniformly good. There is no apparent deterioration of these results over time and patients maintain substantial improvement in pain relief, function and power after surgery.

Jason L. Dragoo, M.D.
Marina Del Rey, CA
Stephen Kay, M.D.
Los Angeles
Richard Lee, B.S.
Marina Del Rey

Complications Using The Bionx Bankart Tack in Shoulder Stabilization (SS-09)

Objective: To report on problems encountered with the Bionx Tack. Design: Retrospective review. Setting: Outpatient surgery center and clinic. Patients: Six patients over 3-year period identified, 6 out of 39 total patients (age - 17 to 31). Intervention: Due to persistent pain following arthroscopic stabilization, repeat arthroscopy revealed broken tacks (4), loose tacks (2), and recurrent Bankart (1). All patients had undergone the standard protocol for post stabilization with the Bankart Tack but due to persistent pain and decreased external rotation causing pain, repeat arthroscopy was deemed necessary. Main Outcome Measure: Relief of pain and restoration of function. Main Results: Five out of 6 have had 100% pain relief and full external rotation restored as well as full range of motion about the shoulder. One of 6 has persistent pain with end range external rotation. Conclusion: Stabilization of labral detachments using the Bionx Bankart Tack has been proven to be effective in restoring capsulolabral continuity. However, as this paper illustrates, there can be complications associated with the Tack from breaking of the PLLA material to loosening of the Bankart Tack when it is placed in the glenoid bone. Attention to this problem could help explain pain that is persistent after stabilization for a Bankart lesion within the shoulder that exceeds 4 to 6 months following surgery.

Philip Q. Johnson