provement in Lysholm score among groups, and patients in group 3 experienced greatest side-to-side difference by KT-2000 arthrometer. Radiological study showed that the angle between Leo's line and femoral tunnel in MRI axial view was greatest in group 1 ($P \leq .05$) and the angle between joint line and the graft on oblique coronal view was greatest in group 3 ($P \leq .05$). Conclusions: This study suggests that the postoperative symptoms are related to Pivot shift rather than the results of Lachman test, and the residual Pivot shift is related to the vertical placement of the reconstructed ligament in coronal plane.

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The Technique of Suprascapular Nerve Block for Shoulder Arthroscopy (SS-17)

The suprascapular nerve originates from the C5 and C6 nerve roots of the upper trunk of the brachial plexus with a contribution from C4 usually present as well. The suprascapular nerve descends posteriorly, passing through the scapular notch and innervating the supraspinatus muscle and more distally the infraspinatus muscle. It also gives off sensory branches to the shoulder joint. Blocking this nerve prior to shoulder arthroscopy provides preemptive anesthesia and can decrease the postoperative pain. The technique for this block is straightforward. Palpate the "soft spot" medial to the junction of the scapular spine and clavicle. This is at the area of the Neviaser portal. Insert the needle at this site and angled toward the coracoid process. At a depth of about 3 to 4 centimeters, the needle will strike the body of the scapula. Probe with the needle anteriorly until the scapula is no longer felt. Then move the needle back posteriorly until the bone is felt again. This is the area at the base of the coracoid where the suprascapular nerve is located. Flood this area with anesthetic to block the nerve. The procedure code used is 64418-59. This simple technique has been used clinically for over one year with consistently good results. Postoperative medication requirements are reduced and patients leave the surgery center in less time. The technique will be demonstrated.

F. Alan Barber, M.D.

Arthroscopic Release of the Long Head of the Biceps Tendon (SS-18)

Treatment of chronic biceps disorders remains controversial as is its biomechanical role. The literature supports the position that the sole function of the biceps is at the elbow with no significant shoulder related activity. Gowan reported that the biceps acts to control the elbow without a significant effect at the shoulder in Am J Sports Med in 1987. It has been demonstrated to be a weak humeral head depressor which increases in importance with rotator cuff tears. Flatow reported the role of the long head of the biceps tendon as a restraint to superior migration of the humeral head particularly with a rotator cuff tear. Gill, Hawkins, et al., reported a study consisting of 30 patients with arthroscopic release of the long head of the biceps tendon with an average follow-up of 1.5 years. Their patients had an average ASES score of 81.8. They reported 13% poor results. In this study we evaluated clinical and functional outcomes in patients who underwent arthroscopic release of the long head of the biceps. Our hypothesis was that in specific cases where all other pathologies have been ruled out, the site specific release of the long head of the biceps may yield relief of pain and symptoms. 54 patients were diagnosed with biceps disorders over two-years. Arthroscopic release of the biceps long head was either isolated or part of another shoulder procedure. 40 patients were available for follow-up at a minimum of two years. Patients were not excluded for concomitant pathology. Nine of the 40 patients had an isolated arthroscopic release of the long head of the biceps tendon. All patients were examined by one surgeon different than the operating surgeon. Outcome evaluation included the ASES, UCLA, and L'Insalata questionnaires. The following disorders of the long head of the biceps were found: mechanical symptoms including incarceration, chondromalacia of the humeral head from the long head of the biceps tendon, biceps tendinitis, instability of the long head of the biceps, partial tears of the long head of the biceps, tearing of the subscapularis with dislocation of the long head of the biceps tendon. The results of the 40 patients were evaluated at 2.7 years postoperatively (range 24-42 months) with an average L'Insalata score of 77.6, UCLA 27.6, and ASES of 77.6. 82.7% of males had a cosmetic deformity (positive Popeye sign) while 36.4% of females demonstrated a positive Popeye sign. Side to side strength difference was checked curling a 5-lb dumbbell counting reps until fatigue. No patients reported arm pain at rest either distally or proximally. Based on our findings arthroscopic release of the long head of the biceps is an appropriate and reliable intervention for patients with chronic, refractory biceps tendinitis. Cosmetic deformity presenting as a positive Popeye sign and fatigue discomfort during biceps curls were the primary complaints. Although this is not a perfect solution it appears to be an acceptable surgical intervention especially in the light of the decrease in the incidence of rest pain when compared to tenodesis (reported between 10% and 30%).