alternative in the short term follow-up, a longer term study is needed.

Arthroscopic Radial Ulnohumeral Ligament Reconstruction (SS-23) *Sergey S. Dzugan, M.D., Felix H. Savoie III, M.D., Larry D. Field, M.D., Daniel Gurley, M.D.*

Introduction: Posterolateral instability (PLRI) is a little recognized cause of elbow pain and functional impairment. Unlike medial injuries, dysfunction of the lateral ligaments may produce significant impairment in activities of daily living. This presentation details our results with arthroscopic reconstruction of both acute and chronic lateral elbow instability.

Methods: This was a retrospective chart review of 20 consecutive patients with a diagnosis of lateral instability as determined by history, physical examination, and MRI testing. Each patient was managed solely by arthroscopic techniques. The data was collected prospectively in the initial evaluation and at regular 3 month intervals as part of our routine study of all elbow patients. The data of the Andrews-Carson elbow rating scale was collected pre- and post- operatively using the same data base. The average patient age was 35. There were 12 right elbows and 8 left elbows. The average duration of symptoms in the non-acute group prior to surgery was 22 months. All patients had nonoperative measures including injections, medications, physical therapy and bracing prior to surgery. The indications for surgery were pain, functional impairment, and a failure of nonoperative treatment in all cases. All surgeries were performed on an outpatient basis under general anesthesia in the prone position. Surgical findings included avulsion of the entire complex from the humerus in 7 patients, mid-substance tearing and stretching in 10 patients, and a combination of both injuries in 3 patients.

Results: Four of 20 patients (20%) had acute or subacute repairs for recurrent elbow instability. Ten of the 20 (50%) arthroscopically treated patients had the addition of an anchor to supplement the arthroscopic suture plication. All patients were re-examined between 18 and 60 (average 33) months postoperatively. The Andrews-Carson scores for all arthroscopic repairs improved from 146 to 176 ($p=0.0001$). Subjective scores improved from 55 to 83 and objective scores improved from 91 to 93. Acute repairs produced the best results functionally with the majority of patients returning to normal activities.

Conclusion: In both acute and chronic instability patients, arthroscopic repair and/or plication of RUHL is a safe technique that produces satisfactory results and can be a valuable alternative to an open approach.

Arthroscopic Debridement and Microfracture of Capitellar Osteochondritis Dissecans of the Elbow (SS-24) *Chris Pokabla, M.D., Larry D. Field, M.D., Felix H. Savoie III M.D., J. Randall Ramsey, M.D., Christopher K. John, M.D.*

Introduction: Osteochondritis dissecans of the humeral capitellum is a condition seen with relatively high frequency in young baseball players and gymnasts. A variety of surgical procedures have been utilized to treat this challenging condition with variable success rates. The purpose of this study is to analyze the results of arthroscopic debridement and microfracture for osteochondritis dissecans of the capitellum.

Methods: Utilizing the computerized database of an orthopaedic sports medicine practice, a retrospective chart-review was performed on a consecutive series of patients who underwent arthroscopic treatment for osteochondritis dissecans of the capitellum between January 1994 and August 2008. Patients were evaluated clinically by assessing range of motion, return to sport and Andrews-Carson elbow scores. Plain radiographs were also reviewed to evaluate for progressive degenerative changes.

Results: In the fourteen-year period investigated, twenty-nine elbows in twenty-eight patients were identified that had undergone arthroscopic debridement and microfracture. All patients had unstable lesions based on clinical exam and magnetic resonance imaging or had failed an attempt at conservative treatment. At an average follow-up of twenty months after surgery, the mean range of motion was 4.5 to 136.4 degrees. The average Andrews-Carson score was 186.8 and eighteen of the twenty-eight patients (64%) returned to sport. Radiographic evidence of lesion progression was seen in only two of the twenty-nine (7%) elbows treated.

Conclusion: These results show that arthroscopic debridement and microfracture can produce good to excellent outcomes in the majority of patients with osteochondritic lesions of the capitellum. There is a low incidence of progressive radiographic changes associated with this technique and the majority of patients are able to return to sport in the short-term.

Magnetic Resonance Imaging After Arthroscopic Microfracture of Capitellar Osteochondritis Dissecans (SS-25) *Greg Lervick, M.D., Corey Wulf, M.D., M. Russell Giveans, Ph.D.*