

ing; one patient had protein C deficiency while another had protein S deficiency. There were no fatalities associated with these complications. Six patients were placed in the lateral decubitus position and one patient was placed in the modified-beach chair position ($p < 0.05$) during arthroscopic shoulder surgery. Of interest, five of these seven events involved the operative upper extremity (71%), and two of these seven events (29%) involved the ipsilateral lower extremity. Six patients underwent rotator cuff repair, 5 patients underwent subacromial decompression, and three patients had distal clavicle resections. Five patients were smokers, and two were worker's compensation.

Conclusions: Postoperative deep venous thrombosis and pulmonary embolism are unusual but serious and potentially fatal consequences of arthroscopic shoulder surgery. We report a low incidence of just 0.24%, but all patients in this series required hospitalization and anticoagulation therapy. Despite the small size of this cohort, there was an association with patient positioning in the lateral decubitus position. It remains critical to be aware of this potential complication, and further investigation is necessary to determine if mechanical or pharmacologic DVT prophylaxis after arthroscopic shoulder surgery would be beneficial.

Arthroscopic Debridement of Severe Glenohumeral Osteoarthritis (SS-37). *Mark Burszty, MD, Robert Nirschl, MD*

Purpose: The role of arthroscopic debridement in the treatment of severe glenohumeral osteoarthritis (OA) has not been clearly defined. Our hypothesis is that arthroscopic debridement is a viable option in the treatment of severe glenohumeral OA.

Methods: A retrospective review was undertaken of twenty-one patients who underwent arthroscopic glenohumeral debridement for severe OA between 1996 and 2005 at our center. The operative procedure included intra-articular lavage, debridement of osteophytes, removal of loose bodies, capsular release, and synovectomy. Our technique utilized an accessory posterior-inferior portal in order to excise as much of the characteristic inferior humeral osteophyte as possible. The goals of removing the "goat's beard" osteophyte were the restoration of motion (particularly rotation through improved mechanics), and pain relief (via increased diffusion of load forces). Twelve patients were successfully contacted postoperatively, and completed questionnaires which focused on pre-and post-operative pain and activity restriction, as well as overall satisfaction. The twelve patients had a mean age of 59.1 years

(range 44-67) at time of surgery, and were contacted at a mean of 51.9 months (range 8-114) after surgery. Statistical analyses were performed using the paired t-test.

Results: Nine out of twelve patients responded that they would undergo the same procedure again given the same situation. Six were extremely satisfied with their result, three were somewhat satisfied, and three were dissatisfied. Subjective pain assessed using the VAS rating from 0-10 points decreased significantly from a mean of 6.2 pre-operatively to 3.2 post-operatively ($p = 0.01$). Subjective assessment of shoulder function using the scale incorporated in the Constant score significantly increased from a mean of 1 pre-operatively to 4.3 post-operatively ($p = 0.002$). Two thirds of our sample (eight out of twelve patients) returned to regular participation in sports or physically demanding recreational activity. Results did not deteriorate with time.

Conclusions: Arthroscopic glenohumeral debridement for severe OA led to substantial improvement in patient satisfaction, pain, and function, in eight out of twelve patients. Studies with a prospective design, incorporation of objective outcome measures, and comparison to other surgical options for severe glenohumeral OA would further elucidate the role of arthroscopic debridement.

In-Vivo Measurement of Rotator Cuff Perfusion Using Laser Doppler Flowmetry (SS-38). *Kenneth J. Accousti, MD, James Gladstone, MD, Bradford Parsons, MD, Raymond Klug, MD, Evan Flatow, MD*

Purpose: The purpose of this study is to examine the effects of tendon perfusion following arthroscopic rotator cuff repair. A laser Doppler flowmeter was used to measure the tissue perfusion of the rotator cuff before and after arthroscopic rotator cuff repair. There was a significant decrease in the perfusion of the bursal side of the supraspinatus tendon after both the medial and lateral sutures were tied compared with intact tendon.

Methods: A laser Doppler flowmeter (BLF21A Transonic Systems Inc. Ithaca, NY) was used to measure the tissue perfusion of the rotator cuff before and after arthroscopic rotator cuff repair using suture anchors with a double row configuration. Cuff perfusion was assessed in normal tissue as well as in torn cuffs both before and after the arthroscopic knots were tied.

Results: Average perfusion for intact tendon was 6.2 (ml/min/100gm). The average perfusion for torn supraspinatus tendons was 3.3 (ml/min/100gm) before repair and 1.9 after repair. There was a significant difference in perfusion between healthy tendon and torn supraspinatus both before and after repair. There was a