

rating, IKDC objective and Tegner scores were significantly higher than their respective pre-operative values. Mean Rolimeter side to side difference was significantly reduced from 3.7 mm (SD = 0.7) pre-operatively to 1.3 mm (SD = 0.8) post-operatively. In 2 cases there was a re-rupture of the repaired ligament and ACL reconstruction was performed.

Conclusions: In our athletic population, ACL primary repair in acute incomplete lesion combined with bone marrow stimulation effectively restored knee stability and function.

Septic Arthritis Following ACL Reconstruction: The Ottawa Treatment Protocol and Outcomes (SS-49)

Emilio Lopez-Vidriero, MD, PhD, Olufemi Ayeni, MD, FRCS, Tracy Rupke, MD, Ahmad Bin Nasser, MD, FRCS, and Donald H. Johnson, MD, FRCS

Introduction: Septic arthritis following ACL reconstruction is a rare but disastrous complication which consequences include arthrofibrosis, chondrolysis and osteomyelitis. There is little data concerning the incidence of this complication in the literature. Moreover, there is no consensus about the surgical treatment protocol, whether is better to retain the graft or to remove it and how does it affect to the outcomes. We present our clinical and quality of life outcomes after one year treatment with our protocol including graft retention.

Methods: 17 of 1,847 patients who underwent ACL reconstruction surgery were identified as infected following retrospective chart review in our institution (University of Ottawa) from 1995 to 2005. Mean age was 37 years old (range 18-56). Gender ratio was 14 male / 3 female. Laterality 13 left / 4 right knees. The diagnosis was achieved by clinical suspicion and serum markers (ESR, CPR, WBC) followed with aspiration and culture of intraarticular liquid. After that, our treatment protocol included iv antibiotics (empiric and culture guided) and knee arthroscopy performing debridement and lavage with 12 L of saline irrigation as well as graft retention when possible. Clinical and Radiographic data were collected at a minimum of 1 year follow-up (IKDC, KT-1000, Lysholm, SF-12, Tegner, Cybex Strength testing).

Results: The Incidence of septic arthritis following acl reconstruction was 0,92%. Bacteriology results were as follows: 7 staphylococcus aureus, 4 Propionibacterium acnes, 1 Klebsiella oxytoca, 5 no growth The time from ACL reconstruction to first symptoms of infection was 37 days (range 4-63) The time from symptoms to arthroscopic debridement was 5,5 days (range 0-33) Serology markers were as follows: ESR mean 69 (range 23-128), CPR 136 (50-387), WBC 10.3 (6-15) The av-

erage follow up was 41 months (range 12-85). 16 of 17 grafts were retained after 1.53 procedures per patient. Antibiotic treatment lasted 5.2 weeks on average.

Conclusions: ACL reconstruction is a safe procedure being the incidence of septic arthritis in our series of 0,92%. Our protocol of treatment including debridement, lavage and graft retention is clinically effective and allows for a stable knee in 88,9% of the patients avoiding the appearance of a delayed infection.

Clinical Results of Arthroscopic Popliteal Cyst Removal using Posteromedial Cystic Portal (SS-50)

Sang Hak Lee, MD, Jin Hwan Ahn, MD, Jae Chul Yoo, MD, and Moon Jong Chang, MD

Introduction: We sought to evaluate the functional and radiographic outcome of popliteal cyst combined intraarticular problem that were arthroscopically treated via decompression and cystectomy using additional posteromedial cystic portal.

Methods: From March 2000 to February 2007, 36 patients were treated with a modified arthroscopic technique to decompress popliteal cyst. The connecting valvular mechanism was found with all case at the posteromedial compartment through the anterolateral viewing portal and corrected by resection of the capsular fold through the posteromedial working portal. For cysts that had multiple fibrous septums, authors have used an additional portal, so called the 'posteromedial cystic portal,' for complete cyst removal. The most common associated intraarticular lesion was medial meniscus tear and it was also treated arthroscopically. The functional outcome was evaluated by Rauschnig and Lindgren knee score. All patients were evaluated the magnetic resonance imaging (MRI) documenting the popliteal cyst and associated intraarticular lesions preoperatively.

Results: All patients were able to return to their prior life activities with little or no limitation and no reoperation was required after an average follow-up of 41 months (range, 12 to 88 months). The Rauschnig and Lindgren knee score improved from grade 1 in 8 cases; grade 2 in 22; grade 3 in 7 preoperatively to grade 0 in 30 cases; grade 1 in 7 cases at final follow-up. The radiographic outcome was evaluated to follow-up MRI with 17 patients. The mean maximum length of cyst was decreased from 5.6 cm (range, 3.7 to 10 cm) to 0.9 cm (range, 0 to 2.7 cm) ($p < 0.01$).

Conclusions: Arthroscopic decompression of popliteal cyst showed good clinical results in terms of postoperative function. More importantly, no patients showed recurrence at final follow-up. Arthroscopic popliteal cyst removal with additional posteromedial cystic