

Results: Acetabular paralabral cysts were identified in 11/42 (26.2%) and 9/42 (21.4%) of the hips by the two respective radiologists with an interobserver reliability of 90.5% (kappa value of 0.74) and intraobserver reliability of 95.2% (kappa value of 0.87). In addition, acetabular labral tears were identified in 35/42 (83.3%) and 33/42 (78.5%) of the hips with an interobserver reliability of 90.5% (kappa value of 0.70) and intraobserver reliability of 95.2% (kappa value of 0.83).

Conclusion: Acetabular labral tears, as a potential source of hip pain, have received a great deal of attention in recent literature. The gold standard for identifying acetabular labral tears is hip arthroscopy, but recent advances in optimized noncontrast MRI have proven effectiveness in identifying intra-articular hip pathology without the invasive nature of hip arthroscopy or gadolinium enhanced arthrography. Acetabular paralabral cysts have also been shown to be associated with underlying labral tears, similar to meniscal cysts in the knee or labral cysts in the shoulder. We report the previously undescribed prevalence of acetabular paralabral cysts and prevalence of labral tears in a young, asymptomatic population. This emphasizes the importance of correlating patient symptoms and using diagnostic, and potentially therapeutic, intra-articular injections when evaluating patients with hip pain and radiographic abnormalities as defined by MRI criteria.

Arthroscopic Management of Femoroacetabular Impingement with Two Year Follow-up (SS-30) *J. W. Thomas Byrd, M.D., Kay S. Jones, M.S.N., R.N.*

Introduction: Femoroacetabular impingement is a recognized etiology of intra-articular pathology and subsequent osteoarthritis in young adults. Arthroscopy has been useful in the management of hip pathology and has been proposed as a method of correcting the underlying impingement. The purpose of this study is to report the results of our early experience in the arthroscopic management of femoroacetabular impingement with two year follow up.

Methods: All patients undergoing hip arthroscopy are prospectively assessed with a modified Harris hip score at 3, 12, 24, 60 and 120 months. 752 patients have undergone arthroscopic correction of FAI. This report consists of a cohort of the first 100 such patients with two-year follow up.

Results: There was 100% follow up at two years. The average age was 34 years (range 13-76 years) with 67 males and 33 females. There were 63 cam, 18 pincer and 19 combined lesions. Among cam types, the average age was 33 years with a male/female ratio of 2.8:1 and

among pincer types, the average age was 38 years with a male/female ratio of 1.2:1. There were 97 acetabular articular lesions (53 Grade IV, 39 Grade III, 5 Grade I), 23 femoral lesions (11 Grade IV, 11 Grade III, 1 Grade II) and 92 labral tears. The median improvement was 20 points (preop 65; postop 85) with 79 good and excellent results. Those with associated femoral lesions did at least as well with median 23-point improvement. Eighteen patients underwent microfracture with a median improvement of 21 points (preop 64; postop 85). None required conversion to total hip arthroplasty, but six underwent a subsequent arthroscopic procedure. There were three complications with a transient neuropraxia of the pudendal nerve and the lateral femoral cutaneous nerve, each of which resolved uneventfully, and one mild case of heterotopic ossification.

Conclusion: Arthroscopic management of femoroacetabular impingement appears to be an appropriate option for many cases. These results are at least comparable to published reports of open methods with the advantages of a less invasive approach.

Open Surgical Dislocation vs. Arthroscopic Approach to Femoroacetabular Impingement: A Prospective Comparison (SS-31) *Benjamin G. Domb, M.D., Itamar Boster, M.D., Thomas W. Smith, B.S.*

Introduction: Surgical treatment of femoroacetabular impingement (FAI) of the hip has been pioneered over the last decade, initially using an open surgical dislocation approach. In recent years, there has been an accelerating transition toward arthroscopic treatment, which may offer shorter recovery time and less post-operative pain. Advocates of the open approach have suggested that superior access and precision of bone work may still offer improved long-term results over the arthroscopic approach. To our knowledge, no study has prospectively compared the results of open and arthroscopic treatment. The purpose of this study was to prospectively compare surgical outcomes for open surgical dislocation vs. arthroscopic approaches to FAI.

Methods: All surgical dislocations performed for FAI over a six month period (group I) were compared to a matched control group of hip arthroscopies (group 2). All procedures were performed for labral tear in the setting of FAI, and all included labral refixation, as well as either osteoplasty, acetabuloplasty, or both. All procedures, both open and arthroscopic, were performed by a single surgeon. All patients were asked to complete four subjective questionnaires preoperatively, and at three, six, and 12 months post-operatively.

Results: There were three patients in group 1, and seven in group 2, with similar average age and gender distribution. At average follow-up of eight months for group 1 the average scores improved from 59.4 to 70.8 for modified Harris Hip Score (HHS), 59.7 to 73.5 for Hip Outcomes Score Activities of Daily Living (HOS ADL), 46.0 to 65.7 for HOS Sports Subscale, 66.9 to 77.1 for Non-Arthritic Hip Score (NAHS). At average follow-up of 3.6 months for group 2 the average scores improved from 60.3 to 88.4 for HHS ($p < 0.05$), 72.2 to 94.4 for HOS ADL, 49.4 to 81.6 for HOS Sports Subscale, 65.0 to 90.5 for NAHS ($p < 0.05$). There were trends toward greater improvement in all scores in group 2 than in group 1.

Conclusion: The results demonstrated improvements in all scores for both groups. While no significant difference was shown between the two groups, there was a trend toward greater improvements at early follow-up with the arthroscopic approach. Currently both open surgical dislocation and arthroscopic approaches remain valid options in treatment of FAI. Further follow-up of this study group is necessary to compare the long-term outcomes of the two approaches.

Hip Arthroscopy After Traumatic Hip Dislocation (SS-32) Victor M. Ilizaliturri, Jr., M.D., Bernal Gonzalez-Gutierrez, M.D., Humberto Gonzalez-Ugalde, M.D., Javier Camacho-Galindo, M.D.

Introduction: To present arthroscopic findings after traumatic posterior hip dislocation in patients with mechanical hip symptoms.

Methods: All the patients that were treated with hip arthroscopy for mechanical hip symptoms after traumatic posterior hip dislocation with subsequent closed reduction between 2002 and 2006 were included in this study. The time between closed reduction and arthroscopy, arthroscopic findings and treatment, preoperative and last follow-up WOMAC scores and last follow-up X-rays were analyzed. Complications or the need for further surgical treatment are reported.

Results: We had 17 patients (13 male, 4 female), average age 28.5 years (range 19-37). Average time between closed reduction and arthroscopy was 3 months. 14 had anterior labral tears, 6 had posterior labral tears, 16 had acetabular chondral damage, all had femoral chondral damage, 14 had intra-articular fragments. Preoperative WOMAC was 46, last follow-up WOMAC was 87 (45 months average), range 45 to 93. One patient required Total Hip Replacement for Osteoarthritis and one presented avascular necrosis and is waiting for hip replacement.

Conclusion: Our clearest indication for arthroscopy after traumatic posterior hip dislocation was loose fragments inside the joint. Every patient presented mechanical hip symptoms, intra-articular damage was demonstrated in every case. Most of the patients had significant improvement after hip arthroscopy.

Extensive Capsulotomy for Ideal Exposure and Treatment in Hip Arthroscopy (SS-33) Thomas G. Sampson, M.D.

Introduction: Capsulotomy in hip arthroscopy has been used since the 1990's for better exposure and mobility of instruments, as popularized by James M. Glick. As the arthroscopic hip procedures have become more extensive requiring better access to both the central and peripheral compartments for removal of metaplastic bone as in treating Femoroacetabular Impingement, capsulotomy similar to open techniques has been employed.

Methods: An arthroscopic capsular incision is made along the neck of the femur and extended over the labrum taking it along the acetabular rim to expose an area from the base of the femoral neck to the supra acetabular Ilium with an RF probe. It is considered extensive relative to the minimally invasive hip arthroscopic technique. Addition comments on the use of capsulotomy for loose body removal and reshaping of the head neck junction and acetabular rim as well as labral refixation and reconstruction will be discussed.

Results: Since 1999 more than 1000 consecutive hip arthroscopies have been performed by this single surgeon using the technique. The indications and techniques will be discussed as well as the lack of complications. Capsular repair is done when indicated for concerns of instability and rapid return to activities.

Conclusion: Extensive capsulotomy for ideal exposure and treatment in hip arthroscopy is safe and effective. Better exposure and access to central and peripheral spaces are obtained over conventional portal techniques. Complications such as fluid extravasation and dislocation are rare.

Articular Cartilage Regeneration with Autologous Peripheral Blood Stem Cells and Hyaluronic Acid (SS-34) Khay-Yong Saw, M.B., Ch.B., M.Ch.Orth., F.R.C.S.

Introduction: An on-going clinical trial to assess the results of articular cartilage regeneration following subchondral drilling into chondral defects followed by postoperative intra-articular injections of autologous periph-