

that may improve utility in predicting the aforementioned chondral defects.

Methods: Between April 2010 and August 2015, 195 hips (183 patients) underwent hip arthroscopy after undergoing dGEMRIC. Exclusion criteria were previous hip conditions or surgeries, arthritis of >1 Tönnis grade, >180 days between MRI and surgery, and missing sagittal superior dGEMRIC index. dGEMRIC indices measured using four methods, one of which was newly formulated to potentially detect coronal anterolateral (CAL) acetabular damage, were compared to arthroscopically-defined cartilage damage (ALAD and Outerbridge classifications). dGEMRIC indices were compared between non-arthritic hips with no/mild (grades 0 and 1) and those with moderate/severe localized chondral damage (grades 2, 3, and 4).

Results: The three established dGEMRIC indices (sagittal superior, coronal superior, and sagittal anterosuperior) were not significantly different when comparing no/mild to moderate/severe localized chondral damage and demonstrated weak correlations to acetabular cartilage damage. The CAL indices demonstrated a significant difference between no/mild and moderate/severe localized chondral damage, according to both ALAD ($p < 0.0001$) and Outerbridge ($p < 0.0001$) groups, and was moderately correlated to ALAD ($\rho = -0.403$; $p < 0.0001$) and Outerbridge ($\rho = -0.454$; $p < 0.0001$) grades.

Conclusion: The three established dGEMRIC indices did not accurately predict the intraoperative acetabular localized chondral damage in non-arthritic hips. The CAL index was the only method able to differentiate between local non/mildly and moderately/severely chondral damage in non-arthritic hips, and was also moderately correlated with these findings.

The Iliofemoral Line: A Radiographic Sign of Acetabular Dysplasia in the Adult Hip

SS-36

May 19, 2017, 2:45 PM

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Introduction: Several radiographic parameters utilized for the diagnosis of acetabular dysplasia in adults suffer poor reproducibility and reliability. The purpose of this study was to define and validate a novel radiographic parameter (the 'iliofemoral line') for discrimination of hip dysplasia.

Methods: A consecutive cohort of 172 adult patients undergoing hip preservation surgery were included. The iliofemoral line was defined as the continuous line extending from the lateral femoral neck through the femoral head-neck junction to the inner cortical lip of the iliac crest. Percent lateralization of the iliofemoral line was calculated as the horizontal distance of the femoral head

lying outside of the iliofemoral line relative to the total length of the horizontal femoral head diameter.

Results: Percent lateralization of the iliofemoral line was strongly correlated to the lateral center edge angle (LCEA, $p < 0.001$). Values of percent lateralization ranging from 14.5-20.2 predicted the presence of borderline hip dysplasia with a sensitivity of 44.7% and specificity of 94.0%, while values exceeding 20.2 predicted presence of frank acetabular dysplasia with a sensitivity of 81.8% and specificity of 88.5%. By comparison, abnormality of the Shenton line demonstrated a sensitivity of 2.6% and specificity of 94.8% for detection of borderline dysplasia, and a sensitivity of 21.2% and specificity of 99.3% for detection of frank acetabular dysplasia. Compared to the Shenton line, percent lateralization of the iliofemoral line was significantly more sensitive for detection of both borderline and frank acetabular dysplasia ($p = 0.004$ and 0.001 , respectively).

Conclusion: Percent lateralization of the iliofemoral line is a reliable and accurate radiographic marker of frank acetabular dysplasia, and to a lesser extent, borderline dysplasia. Use of this novel radiographic marker may enable earlier detection of borderline and frank hip dysplasia in young adults presenting with hip pain.

Endoscopic Repair of Partial Thickness Undersurface Tears of the Abductor Tendon (PUSTA): Clinical Outcomes with Minimum Two-Year Follow-Up

SS-37

May 19, 2017, 2:50 PM

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Introduction: The undersurface of the abductor tendon is a common location for tears. Endoscopic trans-tendinous repair has been previously described as a technique to both identify and treat these tears. There are currently no two-year outcome studies of this technique. The purpose of this study was to report the minimum two-year outcomes of trans-tendinous repairs of Partial thickness UnderSurface Tears of the Abductor (PUSTA) tendon using patient reported outcomes (PROs), visual analog scale (VAS), and patient satisfaction scores.

Methods: All patients who underwent endoscopic trans-tendinous gluteus medius repair between October 2009 and May 20, 2017 at one institution were prospectively evaluated. Exclusion criteria consisted of less than two-year follow-up, previous hip surgery, inflammatory arthritis, open surgery, full thickness abductor tear, and worker's compensation patients. All patients had a documented pre-operative physical exam with strength testing (0-5) and observation of their gait. Patient satisfaction and PRO scores were recorded preoperatively, at 3 months postoperatively, and annually thereafter. The PRO scores collected were mHHS, HOS-ADL, HOS-SSS, NAHS, and

