



Femoral Acetabular Impingement and Labral Tears

PIER DOCUMENT

PROBLEM:

Femoral Acetabular Impingement (FAI) is defined as the mechanical abutment of the femoral head against the acetabulum¹. This contact is either structural (cam or pincer lesion), functional or a combination of both and results in pain, loss of motion, and disability.

Researchers have questioned if the findings noted on x-ray are a normal morphological changes based on anatomy and biomechanics or a structural pathology³.

These structural changes are apparent in asymptomatic individuals and there are currently no randomized controlled trials showing they lead to early OA or hip surgery².

In a study of over 2000 asymptomatic hips authors noted labral and FAI bone changes in 68% and 67%,

respectively. The prevalence of pathology consistent with FAI was higher in asymptomatic athletes⁵. Pathology in asymptomatic hips also appears to increase with age⁶.

Authors note an 18 fold increase in surgeries from 1999 to 2009 and a 365% increase in surgery between 2004 and 2009 among 20-39 year olds alone⁴. This rapid increase in surgery is thought to be due in part to an increase in MRI being performed in this population.

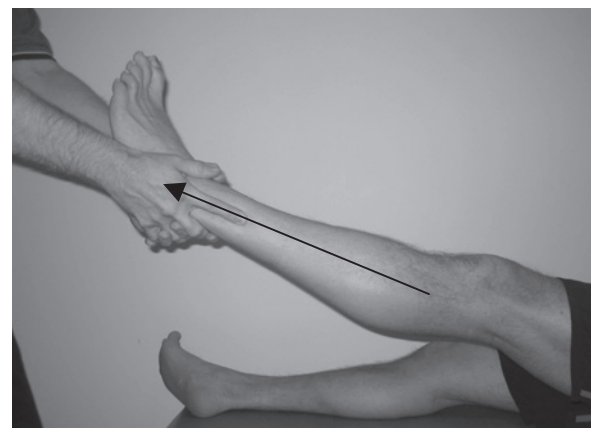


INTERVENTIONS:

Conservative treatments are the first line of treatment for patients with anterior hip and groin pain resulting from labral tears or FAI. Interventions include activity modification, education, manual therapy (joint mobilization/ manipulation, soft tissue mobilization, and dry needling), self hip mobilizations, and exercise (stretching, strengthening, balance, and motor control) interventions.

Experts suggest a 8-12 week course of conservative care may improve decision making for possible surgical referral³.

Ayeri et al. demonstrated a negative response to an injection predicts a negative outcome following surgery more than a positive response for a positive outcome after surgery⁸.



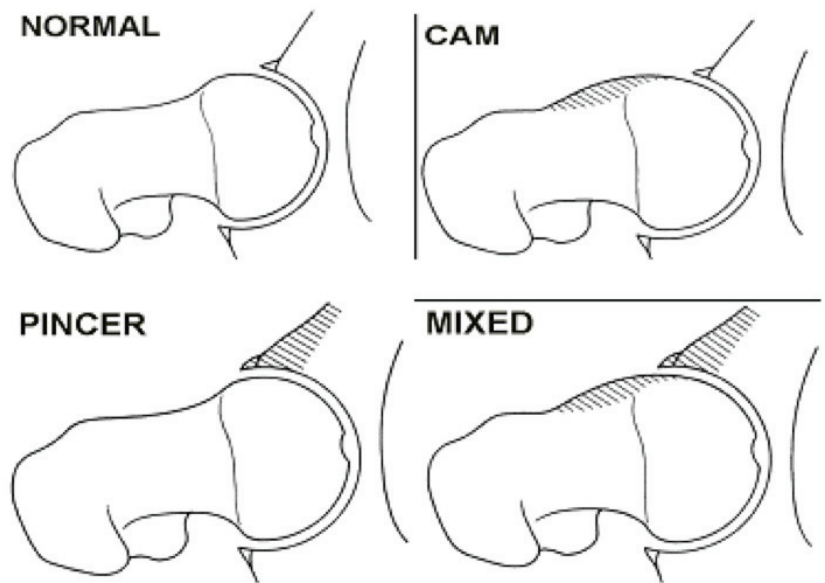
EVIDENCE:

Evidence for the conservative treatment of FAI lesions is currently at a case series level of research for both conservative and surgical treatments. To date no randomized controlled trials or long term data exist on surgical outcomes.

Kemp et al. documented poor outcomes for patients undergoing FAI surgery with greater chondral damage and those over age 40⁹.

Hunt et al. found a multimodal treatment approach consisting of manual therapy, exercise, and education reduced lower quarter impairments and improved function at both short and long term outcomes⁷.

In our experience at Mend, athletes and patients with a diagnosis of labral tears or FAI are able to return to sport following a treatment plan involving manual therapy, exercise, biomechanics evaluation and modifications (ie gait analysis), and education.



REFER:

Athletes and patients with anterior hip and groin pain, loss of hip range of motion, and disability should be referred to Physical Therapy for conservative management.

Pain mainly in the groin (sensitivity .96-1.0) and a subjective report of hip/groin pain with clicking, locking, and giving way (sensitivity 1.0, specificity .85) may assist in the diagnosis of an acetabular labral tear^{10,11}.

References

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