

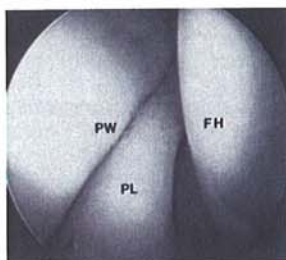
Hip arthroscopy

– a procedure with specific indications

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Hip arthroscopy is performed infrequently in Australia, compared with the United States. It is particularly useful for removing loose bodies or for debriding symptomatic labral tears. Using modern technology to provide an excellent view of intra articular structures, the procedure is well tolerated and has minimal morbidity. In select patients, arthroscopic treatment offers an alternative to "putting up with it" and may delay or supplant hip replacement in some patients with painful hip pathology.



With moderate distraction and the insertion of a spinal needle under fluoroscopic guidance to break the negative intra joint pressure, distraction of at least one centimetre is easily achieved. (PW Posterior Acetabular Wall; PL Posterior Labrum; FH Femoral Head).

Hip joint loose bodies

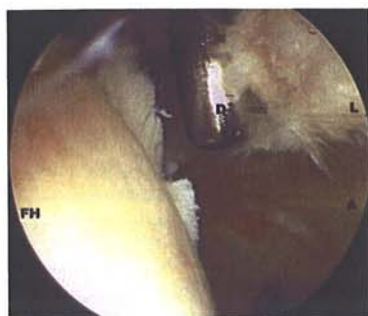
Symptomatic loose bodies represent the clearest indication for arthroscopic intervention. These usually come about from synovial osteochondromatosis or trauma.



Diagnosis is usually easy. Radio-dense loose bodies are seen on plain x-rays and, if necessary, can be confirmed by computerised tomography. Radiolucent cartilaginous loose bodies can be confirmed by enhanced studies such as double contrast arthrography followed by computerized tomography (Arthro-CT).

It is important that loose bodies are removed from the hip because of the poor prognosis associated with intra-articular fragments. The less invasive arthroscopic approach has obvious advantages over arthrotomy with dislocation of the hip.

Labral lesions



A Acetabulum; SL Superior Labrum; FH Femoral Head; D Debrider

The labrum is susceptible to acute tearing and degeneration. Acute labral tears occur in association with posterior dislocation of the hip, however, they can occur with lesser degrees of trauma, such as twisting or squatting.

Labral tears are difficult to image – the diagnostic accuracy of Arthro-CT, MRI or gadolinium-enhanced MRI is often unpredictable.

Diagnosis is often one of exclusion. Intra-articular injection of the hip confirms that the source of pain is intracapsular. The differential diagnosis includes arthritis, chondral injury or impinging synovial lesions.

At arthroscopy, debridement of symptomatic labral tears can result in gratifying symptomatic improvement.

Degenerative arthritis



Acetabulum (degenerate); Femoral head (degenerate); Capsule of hip; Labral tear (arrowed)

Although many patients suffer from degenerative arthritis of the hip, only a select few are candidates for arthroscopic intervention. Arthroscopic debridement is not recommended for milder symptoms, as it may aggravate symptoms and accelerate the need for arthroplasty. Four selection parameters are a useful guide:

1. **Age.** Younger patients are more suited for arthroscopic intervention as a stop-gap measure prior to total hip arthroplasty.
2. **Radiographic findings.** The less advanced the radiographic evidence of disease, the more suitable the patient is for arthroscopic debridement. Advanced radiographic disease, especially when bone-on-bone contact is present, often precludes arthroscopy.
3. **Recent onset of symptoms.** Even in a patient with moderately advanced disease, the recent onset of symptoms makes one more likely to recommend arthroscopy ahead

of hip arthroplasty. Propagation of degenerative labral tearing may explain the relatively acute onset of symptoms in a patient with long standing disease.

4. Failed response to conservative treatment.

This is where the patient is still looking for symptom relief after modification of activity, physical therapy and anti-inflammatory medication.

Chondral Lesions

Isolated chondral injuries are an excellent indication for hip arthroscopy.

Often secondary to impact loading (e.g. direct sideways fall onto the hip), they are more commonly associated with diffuse degenerative arthritis or loose bodies. Chondral damage (or labral tearing) may explain residual hip pain following successful closed treatment for hip dislocation.

Synovial Disease

As with other joints, there is a role for arthroscopic hip synovectomy. A variety of synovial disorders may be addressed including inflammatory disease and miscellaneous synovial conditions such as synovial osteochondromatosis, pigmented villonodular synovitis and possibly haemophilic arthropathy.

Complete arthroscopic synovectomy cannot be performed, but adequate debridement often brings remarkable symptomatic improvement (e.g. in rheumatoid arthritis).

The extent of articular surface damage is important. Seemingly 'healthy' x-rays that show joint space preservation may belie the presence of advanced articular surface damage evident on arthroscopic inspection, as a cause of disabling hip pain.

Other indications for hip arthroscopy

Snapping hip usually occurs in young females, as an audible and palpable snap during the extension phase of the gait cycle. It can be due to subluxation of the psoas over the femoral head. Arthroscopic release of the muscle leaves a functionally longer tendon without the click.

Impinging osteophytes occasionally cause a painful hip. Although osteophytes appear as a radiographic indicator of degenerative disease, an anterior femoral neck osteophyte may produce a mechanical block usually reported by the patient is a "pinching" pain felt when sitting and relieved by standing.

Acute sepsis may respond well to arthroscopic lavage as an excellent alternative to open debridement. In cases of suspected sepsis, arthroscopy offers much better visualisation.

Post Total Hip arthroscopy has been used for removal of entrapped foreign material following total hip arthroplasty ■