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**What fooled us in the knee may trip us up in the hip:  
Lessons from the meniscus**

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3 **Title: What fooled us in the knee may trip us up in the hip: Lessons from the meniscus**  
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### What fooled us in the knee may trip us up in the hip: Lessons from the meniscus

*The only good thing about repeating your mistakes is you know when to cringe.*

*Aleksandr Solzhenitsyn*

Those old enough to remember several decades back when knee arthroscopy revolutionised treatment of the injured meniscus might be forgiven if a sense of déjà vu is emerging from the hip. Hip labral tears are increasingly seen on imaging and at hip arthroscopy in people with hip and groin pain, which coincides with improved diagnostic techniques and the rapid growth of arthroscopic surgery(1). The number of hip arthroscopies have increased up to 1800% in the United States over the past 5-10 years(2), with dramatic increases also been reported in the United Kingdom, Australia and elsewhere worldwide.

The similarities between the meniscus and labrum are striking on several fronts. The knee meniscus and acetabular labrum are comprised of fibrocartilage that has a partially innervated peripheral vascular red zone(3). They are critical to maintain optimal joint force distribution and attenuation, to ensure lubrication and nutrition of articular cartilage via synovial fluid pressure, and hence they maintain healthy chondral surfaces(4, 5). Not surprisingly, their disruption appears to be a potent risk factor for, or an early sign of osteoarthritis (OA)(6). Considering the similarities in structure and function, perhaps similar treatment strategies of both structures should prevail.

Thirty years ago knee arthroscopy revolutionised the surgical approach to the knee, and meniscectomy became the treatment of choice for meniscal tears. However, long-term follow-up studies showed poor patient-reported pain and functional outcomes and a fourteen-fold increase in OA at 20 years compared to controls(7). Even more compelling, five high quality randomised control trials recently reported that the pain relief and functional improvements observed with arthroscopic meniscectomy, in knees with or without concomitant OA, were no greater than from placebo surgery or non-surgical treatments(8, 9) ([hyperlink to BJSM Blog](#)). As a result, arthroscopic meniscal debridement and meniscectomy for degenerative tears and OA is no longer generally recommended(6) ([hyperlink to BJSM Blog](#)).

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However at the hip, the current practice for acetabular labral tears is arthroscopic labral resection, debridement or repair. This practice is supported by a growing body of level IV evidence, as highlighted in our recent systematic review(1). Early surgical outcomes in the hip appear to mirror what we know about the knee: repair and preservation is better than debridement, which is better than resection. While these case series report improvements in pain and function for up to 10 years post-operatively the long-term effect of labral repair are unknown. Critically, the lack of randomised controlled trials limits confidence in these results(1).

Can we learn from the meniscus? Improvements seen in patient reported outcomes in uncontrolled trials of labral surgery reflect those observed in meniscal surgery, which were later refuted by high-quality randomised controlled trials(8, 9) ([hyperlink to BJSM Blog](#)). Furthermore, there is rich epidemiological data describing OA development following arthroscopic meniscal surgery at the knee(6). Is it possible that arthroscopic labral surgery does not result in superior outcomes compared with non-surgical interventions or reduce the risk of hip OA?

Importantly, and similar to the arthroscopic meniscal procedure, patients with labral pathology *and* co-existing chondral lesions report poor patient-reported outcomes(1, 10) in line with those reported in advanced OA. Moreover, similar to the knee concomitant labral and chondral pathology may result in end-stage hip OA and subsequent total hip arthroplasty(10).

Studies into non-surgical management of labral tears are rare(1). There are no randomised controlled trials comparing surgical and non-surgical management of labral tears(1). Similar to the knee, non-surgical treatment strategies for labral tears may restore optimal joint mechanics and reduce load on the damaged labrum. These may include hip muscle strengthening, manual therapy techniques to improve joint range of motion and reduce impingement, movement re-training, neuromuscular programs that improve gait biomechanics, and weight control. Such strategies may prove to have similar or better effects on patient-reported outcomes and progression to hip OA than surgical strategies.

Randomised controlled trials investigating surgical and non-surgical treatments are urgently needed if the failures of the management of meniscal injuries are to be avoided in patients with acetabular labral pathology, and an epidemic of post-surgical hip OA is avoided.

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