

Hip Pain

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Physiotherapy for OA of the Hip

Arthritis of the hip is a common presentation in physiotherapy practice. Anecdotally, manual & exercise therapy interventions are very effective in improving pain and function for this condition. This has recently been backed up by research.

Manual Therapy

There is good evidence that manual therapy can help improve function, and give symptomatic relief for people with hip joint OA (Abbott et al 2013; Bennell 2013; French et al 2013; Hoeksma et al 2004). These benefits were found to be maintained for up to 1-year (French et al 2013). In the reviewed trials, manual therapy was found to be superior to exercise therapy, possibly due to poor patient compliance with exercise. Joint mobilisation can help to stretch the stiff joint capsule, improve accessory gliding movements, and temporarily improve synovial fluid lubrication of the joint. As you know, patients with hip & knee OA frequently suffer acute flare-ups, leading to severe pain and loss of movement. I have found hip mobilisation can give dramatic relief of acute pain and restore function. It is also effective in the medium stages of the disease, to give better mobility and reduce pain with movement. A seat-belt is a useful aid to mobilisation. Depending on the main restrictions, mobilisation can be performed in flexion, neutral or extension, to improve general flexibility, and rotation, lateral and caudal gliding of the joint.



Muscular dysfunction

Muscles around the hip and thigh are significantly

affected, particularly as the disease progresses. Muscles can benefit greatly from treatment:

1. **Strengthening.** It is well documented that the quadriceps, gluteals and deep hip rotators get progressively weaker through the course of the disease (Bennell 2013; Grimaldi, 2009a & b). A recent study has shown that gluteal weakness arises through 'arthrogenic inhibition', similar to quadriceps inhibition that has been documented with knee pathology (Freeman et al 2013). The lumbosacral core is also likely to be affected. A recent study showed that core strengthening was more effective than passive stretching, in improving functional hip mobility (Moreside & McGill, 2013). Specific strengthening exercises can help to maintain strength or delay deterioration. It is unknown to what extent muscle imbalances contribute to the development of hip OA. These are sometimes brought about by habits or previous injury, and become patterned in the CNS. There may be circumstances where strengthening & neuromuscular retraining help to prevent disease progression through correcting faulty movement patterns.
2. **Releasing tension & muscle shortening.** Both pain and restricted joint movement cause tension and pain in muscles close to the joint. The muscles most affected are the piriformis, gluteals, adductors, psoas, and tensor fascia lata (TFL). TFL does not atrophy to the extent of other muscles in advanced OA (Grimaldi et al 2009b), suggesting that it takes on a greater

abduction role as the gluteals weaken. Painful trigger points in this muscle are common. Deep tissue releases, trigger point massage, and dry needling can be very effective in giving temporary reduction in tension. Massage is also beneficial prior to mobilisation, to help reduce muscular resistance to joint gliding.

Stretching: Patients are taught how to stretch muscles which typically shorten – iliopsoas, quadriceps, TFL, & the hip adductors.

Gait correction and assistance with ADL's

Abnormal movement patterns develop quickly when there is hip pain and weakness, and proprioception is known to be affected with lower limb OA. As well as strengthening, gait and other functional activities can be improved with education and exercise. Strategies are taught to assist with activities like stair climbing, gardening and housekeeping. Balance re-training is also beneficial, and this helps to guard against secondary injury.

Treatment of Associated Joint Problems

Pain, antalgic gait, and restricted movement in the hip often lead to secondary overload in other regions of the body. The lumbar spine and SIJ's are frequently affected, and will benefit from maintenance therapy, including mobilisation and massage. The knee joints may also require treatment from time to time, including strengthening and stretching exercises.

General conditioning

The disability related to lower limb OA leads to reduced function, endurance and strength. Gym based exercises or a home programme are helpful to improve walking endurance and general conditioning.

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