

COMMON SPORTS HIP INJURIES The Expert Guide

With contributions from Orthopaedic Surgeon, Mr Camdon Fary



COMMON SPORTS HIP INJURIES

Hip pain can be distressing, debilitating, and difficult to diagnose without a trip to your doctor. For runners especially, persistant and progressive hip pain shouldn't be ignored. In the long-term, untreated hip pain increases your chance of more severe injuries and even surgery down the road.

ANATOMY: HOW YOUR HIP WORKS

The first step to finding out what's behind your hip pain is understanding how your hip works.

Your hip is a ball-and-socket joint: the acetabulum forms the socket, and the femoral head (top of the thigh bone) acts as the ball. Both are lined with cartilage which cushions your joint and the socket is surrounded by a labrum which acts as a rubber seal, holding the ball securely in the socket.

Numerous muscle groups and ligaments attach around your hip, moving, guiding, bending and rotating the joint. When you exercise, the cartilage in your hip prevents friction as your joint moves. But with time or trauma, cartilage can wear or become damaged, bones, muscles and tendons can also become damaged. Any of these problems can lead to hip pain.

The most common causes of discomfort in your hip are:

PSOAS TENDINOPATHY

The psoas muscle tendon is attached to the lesser trochanter (a small bony prominence next to the hip). The psoas muscle acts both as an important hip flexor and stabilises the hip joint. When it becomes inflamed or irritated from partial tears, it can cause pain, which you'll usually feel in your groin or inner thigh. For more information, refer to our page on Psoas Tendinopathy.

TROCHANTERIC BURSITIS

Bursae are sacs of liquid found between soft tissues rub over hard tissue such as bone, muscles and tendons or skin over bone. They ease the friction created by these tissues rubbing together. When bursae become inflamed, they can become painful.

The most common type of bursitis is trochanteric bursitis. This bursa protects soft tissue over the greater trochanter (the protrusion where the thigh bone juts outward) from rubbing on the bone. For more information, refer to our page on Trochanteric Bursitis.

HIP LABRAL TEAR

The labrum in your hip is a ribbon of fibrocartilage surrounding the socket, it is similar in composition to the meniscus in your knee and works as a shock absorber but also acts as a suction cup stabilising the joint which the meniscus does not. Further, unlike meniscal it is attached to cartilage and so tearing your labrum also implies damage to the cartilage (arthritis) which is not always the case with a meniscal tear. For more information, refer to the section on Hip Labral Tear.



WHEN SHOULD YOU CONSULT A SPECIALIST FOR YOUR HIP PAIN?

Not all hip pain requires medical attention; most minor injuries can be managed effectively at home with conservative treatments. However, you should see your healthcare provider if:

- If rest, ice, heat or over-the-counter paracetamol and NSAIDs doesn't relieve your pain
- You've developed pain that interferes with your normal day-to-day activities
- You're experiencing recurring or repeated bouts of pain
- You can't move your leg or hip, or bear weight on your leg



PSOAS TENDINOPATHY

SYMPTOMS

If you have tendinopathy, you'll usually have:

- Pain on the inside of the hip, groin and thigh
- Pain when lifting your leg
- Pain that worsens during activities like squatting, getting up from a deep chair or getting out of a car
- Pain walking up stairs

COMMON CAUSES

Psoas tendinopathy can result from any of the following:

- Overusing your joint through exercise or work, such as climbing or running up stairs or trauma
- Stress on the soft tissues; this may be due to an abnormal or poorly positioned joint or bone (such as leg length differences or arthritis in a joint)
- Hip bone spurs or calcium deposits in the tendons that attach to the trochanter

DIAGNOSIS

Your doctor will check to see if resisted hip flexion and straight leg raise causes pain. If this is the case, they'll often confirm the diagnosis through additional tests like ultrasounds or MRIs.

TREATMENT

The goal in treating tendinopathy is reducing pain, maintaining mobility, and avoiding disability and a recurrence of the injury.

Your doctor may recommend a combination of rest, physiotherapy, massages, heat, and cold application. More advanced treatment options include:

- Physical therapy involving range of motion exercises, stretches and hydrotherapy
- Non-steroidal anti-inflammatory drugs, such as ibuprofen or naproxen
- Corticosteroid or PRP injections

Your doctor should only recommend surgery when conservative treatments have failed. Arthroscopic (keyhole) surgery for psoas tendinopathy is called a psoas tenotomy. The operation essentially lengthens the tendon, allowing it to heal in an extended position within the tendon sheath.



TROCHANTERIC BURSITIS

SYMPTOMS

Trochanteric bursitis usually results in:

- Pain on the outside of the hip and thigh or in the buttock
- Pain when lying on the affected side
- Pain when pressing the bony outside of your hip bone (greater trochanter)
- Pain that worsens during activities like getting up from a deep chair or getting out of a car
- Pain walking up stairs

COMMON CAUSES

Most cases of trochanteric bursitis are caused by:

- Injury to the hard point (greater trochanter) of the hip: falling on your hip, bumping your hip into an object, lying on one side of your body for an extended period, and so on
- Overusing or injuring your joint area through exercise or work, such as climbing, running up stairs, deep squats or standing for long periods

Bursitis usually occurs in female and middle-aged patients.

DIAGNOSIS

A doctor will usually diagnose bursitis by reviewing your clinical symptoms and thoroughly examining your hip. Often, they'll confirm the diagnosis through additional tests like ultrasounds or MRIs.

TREATMENT

The goal in treating bursitis is reducing pain and inflammation, maintaining mobility, and avoiding disability and a recurrence of the injury. As a general rule, you should:

- Avoid repetitive activities that put stress on your hips
- Lose weight as required
- Get a properly fitting shoe insert to combat leg length differences
- Maintain strength and flexibility in your hip muscles

Your doctor may recommend a combination of rest and heat or cold application. More advanced treatment options include:

- Non-steroidal anti-inflammatory drugs, such as ibuprofen or naproxen
- Corticosteroid or PRP injections
- Physical therapy involving range of motion exercises and splinting

Your doctor should only recommend surgery when conservative treatments have failed. Two options include arthroscopic (keyhole) surgery, known as a bursectomy, and lliotibial Band Release (ITB) surgery.

HIP LABRAL TEAR AND/OR FEMOROACETABULAR IMPINGEMENT

SYMPTOMS

Labral tears can cause no pain or symptoms if they are stable. However, particularly if caused by trauma or do not heal and increase in size, they can cause:

- Groin pain
- Thigh pain radiating from the hip
- Clunking, clicking and locking in the hip
- Difficulty walking
- Loss of movement in the hip

Labral tear pain is often made worse with activity– particularly sports and positions where the ball and socket touch, such as sitting in low chairs, getting up from chairs, climbing stairs, driving, and putting on shoes and socks.

COMMON CAUSES

Your labrum can tear from:

- Trauma: injury or subluxation/dislocation of your hip joint, such as during car accidents or contact sports
- Overuse or repetitive motions: this can lead to joint wear and tear that eventually results in a hip labral tear

 Femoroacetabular Impingement: if your femoral head (Cam) or acetabulum (Pincer) are abnormally shaped and come into contact with each other, the increased friction can damage the labrum and cartilage. This is a mechanical problem and as a result can fail conservative management if impingement is not avoided. There is much ongoing clinical research both locally and internationally as to the optimum way to manage impingement

DIAGNOSIS

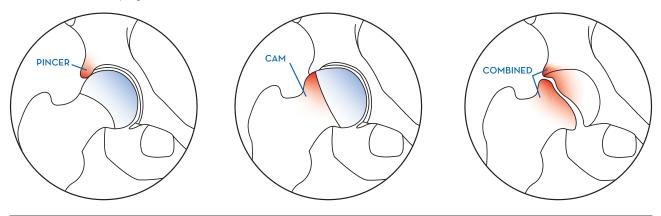
Hip labral tears rarely occur in isolation. In most cases, other structures within the hip joint are also injured. If your doctor suspects this to be the case, an X-ray will identify fractures and structural abnormalities. They'll often request an MRI to confirm labral tears.

TREATMENT

Most labral tears won't heal without surgery, although patients with mild symptoms can usually be treated conservatively by modifying their activity. Short term treatments include:

- Medication: analgesics and anti-inflammatories
- Avoiding positions that cause pain
- Injections into the hip joint (can also be useful as a diagnostic test)

Hip arthroscopy (keyhole surgery) is usually successful in treating labral tears and bone abnormalities.



Femoroacetabular Impingement:



EXPERIENCE. The Difference.

ST VINCENT'S PRIVATE HOSPITAL MELBOURNE ORTHOPAEDIC CARE

St Vincent's Private Hospital Melbourne performed over 10,000 orthopaedic surgeries in 2018. We have an enviable reputation for orthopaedics in Australia and around the world. As a centre of excellence for orthopaedics, we attract local, interstate and international sports stars. Our commitment to the specialty is evident in the delivery of safe and high quality healthcare and is what really stands St Vincent's Private apart.

MELBOURNE'S LEADING ORTHOPAEDIC SURGEONS

Many of the state's most experienced orthopaedic surgeons consult on site at St Vincent's Private Hospital or are located within immediate proximity. Our surgeons specialise in many areas of orthopaedic expertise like joint replacement surgeries including hip, knee, ankle, wrist, shoulder and elbow; orthopedic interventions including sport medicine and injuries; and tumour and reconstructive surgery.

STATE OF THE ART THEATRES

Our theatres are equipped with the latest technology and instruments to support our surgeons in providing the best treatment plan for patients and to help patients achieve the best outcome. We are one of the first hospitals in Victoria to have the Mako Stryker system. Stryker's robotic-arm assisted surgery is a minimally invasive treatment option. The robotic arm is controlled by the surgeon and allows for tactile, auditory and visual feedback and limits the bone preparation to the diseased areas. It provides customised implant positioning, placement and real time adjustments for each individual patient.



HIGHLY EXPERIENCED TEAM

Our orthopaedic unit has dedicated nursing and allied health staff who are highly trained and well experienced in managing all orthopaedic conditions. Our primary theatre nurses have all undergone additional orthopaedic specialty training. All of which means our surgeons have a great sense of trust in our medical teams care and capacity to identify clinical issues.

ON-SITE REHABILITATION

Our purpose-built on-site inpatient rehabilitation facilities at both <u>East Melbourne</u> and <u>Werribee</u> hospitals provide assistance for patients recovering and reconditioning from surgery and injury.

Our outpatient rehabilitation programs continue to aid patients in their recovery even after they return home, and also includes vital exercise programs.

Our rehabilitation therapy spaces include brand new purpose built gymnasiums, indoor hydrotherapy pool with change rooms and shower facilities and therapy areas designed for practicing everyday occupations including our home-style kitchen.

PAEDIATRIC ORTHOPAEDIC

Our paediatric unit is the busiest and longest running private paediatric unit in Victoria. The unit is proud to have many highly regarded leaders in the field of paediatric orthopaedics mostly working both at The Royal Children's Hospital and privately at East Melbourne.

There are two on-site clinics catering to paediatric orthopaedic patients.

The <u>St Vincent's Kids Hip Dysplasia clinic</u> allows patients to see an orthopaedic hip specialist, with low radiation paediatric X-rays and ultrasounds all on-site. Paediatric bracing and orthotic services are also provided within the rooms, along with specialised physiotherapy and rehabilitation services.

The <u>St Vincent's Kids Sports Injury clinic</u> provides patients with the benefit of reduced waiting times to see a specialist. The clinic can provide patients with scanning, bracing and rehabilitation facilities in one easy location as well as timely access to surgical management if required.



ST VINCENT'S PRIVATE HOSPITAL MELBOURNE ACCREDITED HIP AND KNEE SURGEONS

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