

# SPORTS INJURY FACT SHEET

## MENISCUS INJURY

### What is a meniscus injury?

The knee is one of the most complex joints in the human body. As many sports place extreme stress on the knee, it is also one of the most common sites for sports injuries.

The knee is a hinge joint that structured to perform two principal actions, flexion (bending) and extension (straightening). It also has slight rotation movements. The muscles which act at the knee are predominantly the quadriceps (extension) and the hamstrings (flexion).

Meniscus tear is a common injury that affects the knee joint. The meniscus are 'C' shaped discs, made of tough cartilage called fibrocartilage. They are positioned on the tibial plateau (top surface of the shin bone) between the tibia (shin bone) and the femur (thigh bone) and are important for distributing load and absorbing shock at the knee joint.

### Risk factors

Meniscal tears can occur in isolation or in combination with a ligamentous injury. The meniscus in the knee is usually damaged by a twist occurring on a slightly flexed knee. A partial or total tear of a meniscus may occur when a person quickly twists or rotates the upper leg while the foot stays planted. Repeated or prolonged squatting can also result in degenerative tears of the meniscus.

Meniscal tears can be degenerative or traumatic. Degenerative tears occur as part of progressive wear in the whole joint or as a result of habitual, prolonged squatting. In the older adult, the tear may be due to a natural degeneration of the menisci that occurs with age. The traumatic type of injury is quite common in the athletic setting. The medial meniscus is more commonly affected than the lateral meniscus, whilst tears in both menisci are less common.

### Signs and symptoms

Pain is usually experienced when a meniscus is injured, particularly when trying to straighten, bend or twist the knee. If the tear is small, the meniscus stays connected to the front and back of the knee. If the tear is large however, the meniscus may be left only slightly intact. Severe, intermittent sharp pain may occur, and is localised to that side of the joint (medial or lateral). This results from part of the tear catching between the articular surfaces of the tibia and femur, blocking full extension or flexion of the knee, causing a 'locking' sensation.

Swelling may occur soon after the injury as a result of inflammation. Complaints of clicking, popping or locking of the knee may also follow a meniscus injury. In some cases, after the initial swelling and pain, the joint settles down and normal activities can be resumed. This may be because the tear in the meniscus is small or the flap does not affect joint mechanics.

### Management

The immediate treatment of any soft tissue injury consists of the RICER protocol – rest, ice, compression, elevation and referral. RICE protocol should be followed for 48–72 hours. The aim is to reduce the bleeding and damage within the joint. The knee should be rested in an elevated position with an ice pack applied for 20 minutes every two hours (never apply ice directly to the skin). A correctly sized compression bandage should be applied to limit swelling and bleeding in the joint.

The No HARM protocol should also be applied – no heat, no alcohol, no running or activity, and no massage. This will ensure decreased swelling and bleeding in the injured area.

A sports medicine professional should be seen as soon as possible to determine the extent of the injury and to provide advice on treatment required. A sports medicine professional may perform a physical examination and take x-rays of the knee. An MRI test may be recommended to confirm the diagnosis. Arthroscopic (keyhole) surgery is usually only reserved for those with significant mechanical symptoms such as recurrent locking, persistent pain or in younger patients where the tear may be repairable.

If the tear is minor and the pain and other symptoms cease, a muscle-strengthening program may be recommended. A large tear produces a flap of meniscus that may interfere with normal joint mechanics. The torn flap of meniscus can cause further damage leading to greater risk of degenerative arthritis. The decision regarding conservative or surgical management is complex and best left in the hands of sports medicine professionals.

The major goal of the rehabilitation program is to normalise walking, normalise pain-free range of motion, prevent muscle wastage, maintain cardiovascular fitness and where possible, return to sport and exercise activities. Rehabilitation after meniscus surgery should focus on early.

Ways to help prevent meniscus injury include:

- Undertaking training prior to competition to ensure readiness to play.
- Warming up, stretching and cooling down.
- Undertaking fitness programs to develop strength, balance, coordination and flexibility.
- Gradually increasing the intensity and duration of training.
- Allowing adequate recovery time between workouts or training sessions.
- Wearing the right protective equipment including footwear. A good pair of shoes will help to keep knees stable, providing adequate cushioning, and supporting knees and the lower leg during the running or walking motion.
- Checking the sporting environment for hazards.
- Avoiding activities that cause pain.
- Avoiding overloading the knee in deep flexion, especially in explosive or ballistic movements.

### Always consult a trained professional

The information above is general in nature and is only intended to provide a summary of the subject matter covered. It is not a substitute for medical advice, and you should always consult a trained professional practising in the area of sports medicine in relation to any injury. You use or rely on the information in this fact sheet at your own risk, and no party involved in the production of this resource accepts any responsibility for the information contained within it or your use of that information.

### Need a sports medicine practitioner?

Visit SMA's *Find a Sports Doctor* [online directory](#) to connect with a qualified Sports Doctor near you.

### Looking for more information?

Sports Medicine Australia (SMA) is the peak national body for sports medicine, sports science and injury prevention education, dedicated to keeping Australians active, healthy and safe.

The SMA website is packed with practical resources, fact sheets and tools to support you, your team and your community to perform at their best while reducing the risk of injury.

You can explore nationally recognised training courses, including Provide First Aid and Provide Cardiopulmonary Resuscitation (CPR), as well as our industry-leading sideline support courses such as Sports Trainer Level 1 and 2, Introduction to Sports Taping, Introduction to Sports Massage and more.

Everything you need is at [sma.org.au](https://sma.org.au).

### Acknowledgements

Sports Medicine Australia wishes to thank the many sports medicine practitioners who provided expert feedback in the development and ongoing review of our Injury Fact Sheets. [More >>](#)

© Sports Medicine Australia 2025

State Netball and Hockey Centre  
10 Brens Drive  
PARKVILLE VIC 2052

1300 711 211  
[info@sma.org.au](mailto:info@sma.org.au)  
[sma.org.au](https://sma.org.au)