



Whether you play sport socially or professionally, a knee injury can put you out of action. Physiotherapists provide expert advice and treatment to speed up recovery and get you active again following knee injury or surgery.

### TYPES OF KNEE INJURIES

**Acute injuries:** Result from a sudden trauma, such as an awkward fall, collision or twist to the knee joint.

**Overuse injuries:** Result from continuous activity or overload such as running, jumping, cycling, weight training or bushwalking. These start gradually during a specific activity, or over an extended period of time and usually relate to a range of factors such as structural or biomechanical problems, strengths and weaknesses, training methods, footwear, or technique.

### ACUTE INJURIES

The ligaments and menisci (cartilage) of the knee may be injured.

**Ligament Sprain (or tear):** Ligaments stabilise or strengthen joints. Over-stretching can cause tears to the ligament fibres, resulting in pain, swelling, loss of movement and instability (giving-way).

**Meniscal (cartilage) tears:** The knee menisci (or cartilages) also provide stability to the knee joint. They are mostly torn during weight-bearing activities that involve twisting and turning. A torn meniscus (cartilage) results in pain, swelling and/or locking and catching of the joint.

**Management Tips:** Many injuries may be successfully treated without surgery by physiotherapy treatment and supervised rehabilitation. If damage is severe, surgery may be required. Physiotherapists work closely with medical practitioners, sports physicians and orthopaedic surgeons to assist recovery and rehabilitation.

# Knee Injuries



### OVERUSE INJURIES

These are much more common than acute injuries, and usually affect the patello-femoral joint (knee cap) or patellar tendon. If left untreated they often get progressively worse. Early diagnosis and treatment may result in a quicker recovery, and less pain.

**Patello-femoral pain:** Patello-femoral (Kneecap) pain affects approximately 20% of the population, and is associated with activities such as bending, squatting (praying) or stair climbing.

**Patellar tendinopathy:** The patella tendon joins the thigh muscle to the leg bone. Injury to this tendon may also be known as “Jumper’s Knee”, because it commonly occurs with repeated jumping and landing activities (basketball, volleyball).

**Management Tips:** Physiotherapy treatment is essential to reduce the pain and disability associated with overuse knee injuries. In addition, physiotherapists are well trained to address potential aggravating factors that may have contributed to the development of the overuse injury.



### CAN KNEE INJURIES BE PREVENTED

You may reduce the chance & severity of knee injuries:

- Warm-up and warm-down before and after exercise
- Build up your exercise program by gradually increasing the frequency, duration and intensity
- Do not exercise through pain
- Maintain good general fitness and lower body strength and flexibility (especially calf, quadricep and hamstring)
- Practise standing on one leg to improve your balance, control and leg muscle strength
- Skiers – get a qualified ski technician to check your boots, bindings and technique

### WHEN TO RETURN TO WORK/SPORT

Your physiotherapist will discuss the injury with you and estimate the time it will take to recover. This will vary from weeks to months, depending on the severity of the injury and your adherence to instruction. The pain and swelling associated with an acute injury subside much faster than the time it takes for the ligament and muscles to regain normal strength. Returning to work or sport too early may delay healing and prolong recovery.

Your physiotherapist can teach you how to tape your knee or fit you with a brace if this is required. Your physiotherapist can help you to plan alternative ways to maintain your fitness and muscle strength while you are recovering from your knee injury.

### HOW PHYSIOTHERAPY CAN HELP

Your physiotherapist will examine your knee to determine the type, extent and causes of your injury, and can expertly decide to treat your knee or refer you to a doctor if its needed. Early treatment will reduce any pain or swelling.

Special techniques such as mobilisations, frictions and soft tissue release may help to increase the movement in your knee joint (if required) therefore, improving your recovery. Your physiotherapist will teach you exercises to improve the strength of the lower limb, thus enhancing the stability and support of the knee. This will not only ease your return to function, but also aid in preventing the recurrence of your injury.

### WHAT TO DO AFTER A SPRAIN

As soon as possible, and for 72 hours after injury, use the RICE method.

**REST:** Take it easy and only move within your limit of pain.

**ICE:** As soon as possible, and for 20 minutes every 2 hours, apply ice in a damp cloth. This helps to control bleeding and pain, reduce secondary tissue damage and swelling.

**COMPRESSION:** Firmly bandage the knee and include 5cm above and below the joint. This also helps to control the swelling.

**ELEVATION:** As much as possible, elevate your leg higher than the level of your heart to reduce swelling.

### REHABILITATE

Recovery can start very early after an injury. Physiotherapy rehabilitation techniques will help reduce the time that your injury is painful and movement is restricted, so that you can safely return to sport faster. Rehabilitation also facilitates a good quality repair and return of normal muscle and nerve function. Avoid any of the **HARM** factors in the first 72 hours to prevent increased swelling, and to help begin early recovery. The **HARM** factors are:

**Heat, Alcohol, Running or Activity, Massage**

### GENERAL

Physiotherapists in Dubai must all be registered with either Dubai Healthcare City or Department of Health and Medical Services. To gain registration, they will have needed to prove their qualifications and have an exemplary record. Ask to see certification of this registration if you require it. They are bound by a professional Code of Ethics and have access to extensive and continuing postgraduate education programmes.

### HEALTH REBATES

You may consult a physiotherapist either directly or by referral from your medical practitioner. Most private health insurance funds offer rebates for physiotherapy treatment.