

# Sports Injuries

**S**port injuries can be acute or chronic. Acute sports injuries occur as a result of a sudden impact or awkward movement. Examples include a cut to the skin or a sprained ankle. Chronic sports injuries develop over time, often due to continual use of the same joints or muscle groups.

Chronic sports injuries can occur due to bad technique or occasionally structural abnormalities, such as an inherited bone or muscle problem. These injuries should be further investigated by a medical professional to determine the cause and to prevent the injury getting worse.

## **Some of the most common sports injuries include:**

- Sprains,
- Strains,
- Cuts and bruises,
- Bone fractures and breaks,
- Tendonitis (inflammation of a tendon),
- Blisters, and
- Head injuries.

Whilst the figures regarding sports injury presentation to A&E are of note, community pharmacies will collectively see many more minor sports injuries.

Common risk factors for sports injury include inadequate warm up, fatigue, over intensive training, unsuitable equipment and a changed environment (e.g. very hot weather, poor lighting, or physical contact with another person or equipment).

Injury prevention can be achieved through dynamic stretching before activity.

A sprain or a twisted joint can happen in most limbs but most commonly in the ankle. One or more ligaments of the ankle experience excessive stress and become abnormally stretched when the foot is moved past its normal range of motion. The sudden excess stress puts a strain on the ligaments. Once the strain goes beyond the yield point, the ligament becomes damaged, or sprained.

Blood vessels leak fluid into the joint, starting from the site of the injury. Increased blood flow and inflammatory exudates including white blood cells, macrophages and leukocytes migrate to the area, causing both inflammation and swelling.

This results in pain, sensitivity and throbbing as the nerves are further sensitised. As further blood flow increases to the site, the area looks a lot redder, feels a lot warmer, becomes more sensitive and there is a decrease in mobility.

Use non-steroidal anti-inflammatory drugs (NSAIDs) to treat pain, reduce any localised heat, decrease swelling and improve mobility. Oral pain relief normally starts soon after the first dose and the full analgesic effect occurs within a week.

Topical NSAIDs can be applied directly to the site of the injury. Topically applied NSAIDs penetrate the skin and result in therapeutically significant concentrations in underlying inflamed soft tissues, joints and synovial fluid, probably entering the synovial joint mainly via systemic circulation.

In tendinopathies (painful tendons), inflammation plays a lesser role and so NSAIDs have little influence on healing but they can help with short-term analgesia. If used in the first seven days in sprains, strains or ligament tears NSAIDs can also be used to limit pain and swelling thus increasing the chances of the patient regaining function and returning to activity sooner.

Patients should be advised to take NSAIDs with food. Following that advice, short-term use of NSAIDs is safe but patients should be advised that long-term use increases the risks of systemic side effects (such as gastrointestinal and cardiovascular effects).

Tennis elbow (epicondylitis) is a painful condition that affects the outside of the elbow. It is caused by strenuous overuse of the muscles and tendons of the forearm and around the elbow joint.

## **The symptoms of tennis elbow include:**

- tenderness around the elbow, and
- pain when moving the elbow.

Tennis elbow is caused by repetitive movement of the muscles in the lower arm. It can be treated with anti-inflammatory medication, an elbow splint to support the arm or a cortisone injection. Sufferers should be advised to avoid activities that cause pain and, in a sporting setting, obtain advice to correct faulty technique.

Tendonitis is inflammation (swelling) of a tendon. Symptoms of tendonitis include:

- swelling, redness and pain at the injured area,
- restricted movement of the affected area, and sometimes
- a change in appearance of the affected area, such as a lump or a visible change in position of a limb.

Tendonitis is a fairly common injury that can result from a strain or tear in a tendon. Tendonitis can occur in the tendons around the shoulder, elbow, wrist, finger, thigh, knee or the back of the heel (Achilles tendonitis).

Blisters are a common minor injury caused by friction on soft skin. Endurance athletes, such as long-distance runners, sometimes develop blisters on their feet. Rowers are at risk of developing blisters on the palms of their hands.

Although painful, most blisters will heal on their own unless they become infected, but they can be easily prevented in the first place by covering tender spots with a friction-

resistant dressing or plaster. If they do occur, then specialist blister plasters, which claim to aid rapid healing by absorbing the fluid, protecting skin from bacteria and helping relieve the pain of friction and pressure, can be used.

Remind customers who have diabetes to be particularly vigilant when checking for blisters, as their foot injuries take longer to heal due to poorer blood circulation.

Athlete's foot (tinea pedis) is a fungal infection that usually begins between the toes.

Symptoms include itching or burning and flaking skin, particularly between the toes, although the whole foot can be affected. The condition can be treated with products containing fungicidal or fungistatic ingredients. Making sure the feet are completely dry after washing; regularly changing footwear and wearing cotton socks can help ensure feet are less fungus-friendly.



# Orthotics and Sports Injury

Written by Hannah Dowling, Kevin Kelly Pharmacy

the wrist into the hand, the Median nerve, the Ulnar nerve, and the Radial nerve.

These Nerves control the function of our hand, the Median Nerve enters the hand via the Carpal Tunnel and controls the fine precision and pinching movement.

The Median Nerve provides sensation to the thumb, index finger, and middle fingers, it does not involve the small finger or pinkie! Carpal Tunnel Syndrome occurs when there is pressure or compression on the Median Nerve.

## Who can get Carpal Tunnel Syndrome (CTS)?

Carpal Tunnel Syndrome is one of the most common conditions affecting the hand.

- Patients who suffer from Rheumatoid Arthritis or Osteoarthritis often present with CTS due to swelling of the wrist joint causing compression on the Median Nerve.
- Patients whose work involves having a tight grip, causing tightening of the Carpal Tunnel such as lorry drivers, taxi drivers and those driving heavy machinery.
- Patients who have had a traumatic injury to the wrist such as a fall.
- Patients who are pregnant or suffer from other conditions which cause retention of fluid, such as menopause or a local infection hence causing compression of the Median Nerve.
- Patients whose work involves a tight grip and hammering causing vibrations thus tightening of the Carpal Tunnel and causing compression on the Median Nerve, such as construction workers.

## Signs & Symptoms of Carpal Tunnel Syndrome:

When the Median Nerve is compressed, there is a sensation of numbness, tingling, burning and pain in the thumb, index finger and occasionally middle fingers. Characteristically the pinkie finger is not affected.

## What are the warning signs of Carpal Tunnel Syndrome?

A weakness of the hand or grip, causing the patient to drop objects.

If untreated these symptoms can develop, causing severe pain and loss of function. Patients very often report waking at night with pain and persistent broken sleep due to the pain.

## How to Treat Carpal Tunnel Syndrome?

The good news is that there is Treatment available for Carpal Tunnel Syndrome!

When Carpal Tunnel Syndrome has been diagnosed, anti-inflammatory medication can help to reduce the swelling of the Carpal Tunnel and so reduce the pressure on the Median Nerve.

A correctly fitted top-quality Carpal Tunnel Wrist support supplied by Kevin Kelly Sports Pharmacy, worn at night will prevent compression of the Median Nerve and will alleviate the pain and broken sleep caused by Carpal Tunnel Syndrome. When sleeping we tend to close our fist, causing compression of the Carpal Tunnel and pain.

## Orthotics

We source the best and most suitable Orthotics for each individual customer and now supply over 40 different types of Orthotics.

## How to Know if Someone needs Orthotics?

Orthotics are very often recommended by Doctors, Physiotherapists, Orthopaedic Surgeons and by us here at Kevin Kelly's Pharmacy for heel pain, muscle pain or plantar fasciitis.

## Key questions to ask customers:

- Do you suffer from very sore feet after getting out of bed, maybe needing to walk on your heels?
- Are your feet sore when you sit down to take a break and stand up again?
- Do you have Heel pain or pain in your big toe or Muscle Ache in your Arches?
- Do you have excessive wear on the outside of your shoes?
- Do you feel unstable when walking or do you stumble?
- Do you have Ankle Pain, Knee Pain or Hip Pain?

If they answer YES to any of the above questions, then they should consider an in person or telephone consultation with us here at Kevin Kelly's Pharmacy. We will carry out a Gait Analysis and consider their lifestyle. We can then assess whether a pair of Orthotics would suit and then recommend and fit a customized pair of Orthotics to suit their own particular need all in the same day.

## Here at Kevin Kelly's Pharmacy the type of Orthotics suitable is decided following a personal assessment of the feet:

- Depending on the foot type; whether they have flat feet or high arches
- Depending on their Lifestyle; Are they on their feet all day? Active lifestyle or sedentary lifestyle?
- Do they have associated hip, knee or back pain?

## What is Gait Analysis:

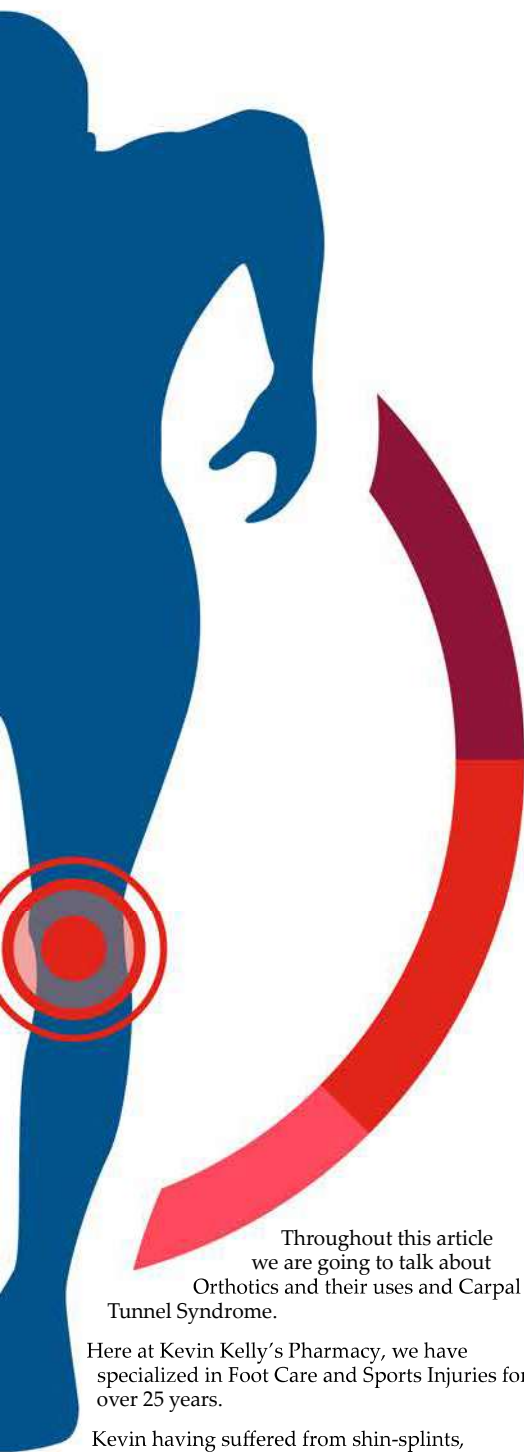
By observing the customer walking, running, sprinting, and jogging.

It allows us to create a complete picture of each individual and allows us to customize a pair of Orthotics specifically for you. Allowing you to return to a pain free walk, round of golf, 5k run and most importantly allowing you to be free of Heel or Foot Pain when at work.

## What will a pair of Orthotics do for you?

A correctly selected and fitted pair of Orthotics will support the Foot Structure, whether you have extremely Flat Feet or Extremely High Arches or if you are somewhere in-between it will allow the Foot to function.

It will support the Arches which are essential for stability and balance, this should allow you to live your life, do your day's work and enjoy your leisure time free from Foot Pain, Ankle Pain, Heel Pain and Lower Back Pain. A pair of Orthotics could prevent you from having to get a Knee or a Hip replacement.



Throughout this article we are going to talk about Orthotics and their uses and Carpal Tunnel Syndrome.

Here at Kevin Kelly's Pharmacy, we have specialized in Foot Care and Sports Injuries for over 25 years.

Kevin having suffered from shin-splints, heel pain, plantar fasciitis and back pain when playing Rugby, sought the advice of a Podiatrist, who recommended that he wear Orthotics in his Rugby boots. This simple and inexpensive product gave him huge relief from pain and soon became the most important part of his kit.

Kevin began wearing Orthotics in his Rugby boots, work shoes, dress shoes, walking boots and even his ski boots!

This positive experience inspired Kevin to develop a keen interest in foot pain, back pain and sports injuries in general and has become a huge part of his business here at Kevin Kelly's Pharmacy.

Through an Online Diploma Course and predominantly through Self-Learning and experience Kevin has built a successful business.

## Carpal Tunnel Syndrome

### What Is Carpal Tunnel Syndrome?

There are three main Nerves that pass through