Triathlon is a highly competitive endurance sport that combines swimming, cycling and running. It’s a great way of keeping fit but is, at the same time, a very demanding activity, which is why it continues to grow evermore rapidly, as people of all walks of life get involved to challenge themselves.

Because of the varied formats of triathlon (Sprint, Olympic and Ironman), coupled with a lack of standardisation in injury surveillance, there are slight variations in the published studies related to triathlon injuries.

Depending on the format, event research reports that 35%-90% of triathletes have suffered a related injury. In terms of the overall incidence of injury, 17 injuries have been reported to occur per 1000 hours of triathlon competition, compared to 5 injuries per 1000 hours of triathlon training.

Despite this you are just as likely to get injured while training, as obviously most people will spend more hours training than in competition. Most triathlon injuries tend to be due to overuse, rather than trauma such as collisions during the swim or crashes on the cycling section which do occur, but not that frequently.

It’s clear that injury is the one thing that can prevent you from enjoying participation in triathlon events. This PhysioRoom.com guide is intended to inform you of the common triathlon injuries and how you can best avoid them.

**Things to remember when buying a brace or support:**

What type do I need? Triathlon appropriate braces come in different shapes and sizes, but can usually be categorised in to four types, sleeves, supports, stabilisers and hinges. Sleeves easily slip over the leg or arm, while supports are adjustable and usually wrap around the knee. Stabilisers offer advanced support by featuring steel springs either side of the joint. While hinged braces allow the joint to move in a natural motion while offering the most support.

What style do I want? There are two standard styles of braces, the slip-on or the wraparound. Slip-ons are used by putting your limb through the brace and pulling up the hand/leg. While wraparound braces, of course, wrap around and can usually be adjusted by straps made of such material as Velcro.

What size do I need? This all depends on which brace or support you choose. Typically, each will feature a size guide, but may require some DIY measuring for products such as knee braces. If you are between sizes, it’s often recommended you go for the larger size, but this may vary from product to product.
BLISTERS

What are they?

Ensure that you have properly fitting running shoes and break these in gradually - never wear new running shoes for a long run.

Moisture wicking blister socks with two layers are excellent for blister prevention. The inner layer stays with the foot; the outer layer moves with the shoe, reducing friction on the skin.

In elite level triathletes who don’t wear socks, friction can also be prevented with the use of an anti-blister stick. The lubricant reduces the friction that leads to blisters.

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Treatment

You must ensure that the blister is cleaned thoroughly by a medical professional before it is lanced with a sterile implement. This can relieve the pressure and pain. Once the blister has been lanced it must be kept meticulously clean in order to prevent infection.

Blister plasters can help healing. They absorb fluids and maintain an important natural moisture balance.

• The 1000 Mile Fusion Socks are high quality blister prevention socks with extra padding for the toe, ball and heel areas. Unique double-layer construction and padding give outstanding comfort with no blisters (manufacturer’s BLISTER FREE GUARANTEE) and no wear-out within 1000 miles of use.

• Gives superb comfort and protection during road running, cross country running, racket sports, cross training and gym work, cycling, dance and other sports. It also has extra protection for the Achilles and is the sock Kevin Pietersen used to protect his injury-prone Achilles tendon.

• The 1000 Mile sock is a sock within a sock. The inner layer stays with the foot, whilst the outer layer moves with the shoe, thus eliminating friction on the skin and reducing wear. The unique mixture of fibres helps to keep the foot dry and blister free, while arch bracing gives extra support.
ILIOTIBIAL BAND FRICITION SYNDROME

What is it?

Although IlioTibial Band Friction Syndrome is known as ‘Runner’s Knee’ it is also prevalent in cyclists. The combination of running and cycling means that IlioTibial Band Friction Syndrome is a common injury in triathlon.

Pain is located on the outer side of the knee joint, which may radiate up the thigh or down the outer-side of the shin. It is exacerbated by running and cycling. Usually, the knee pain from IlioTibial Band Friction Syndrome is only present during activity and settles during rest. However, in severe cases pain can become present at all times, especially when going up or down stairs.

How can you prevent it?

IlioTibial Band Friction Syndrome is an overuse condition that is aggravated by excessive running and cycling training, due to the IlioTibial band rubbing against the outer part of the lower thigh bone during repetitive knee bending exercises. To prevent it, make sure that you gradually increase your training load - there should be no sudden increases in workload as this can cause inflammation of the tissues.

Increased pronation of the foot (uncontrolled lowering of the arch) can lead to increased tension in the IlioTibial Band when running. An insole that supports the arch of the foot can help to control increased pronation.

Treatment

The pain of IlioTibial Band Friction Syndrome is due to inflammation, so ice packs and Non-Steroidal Anti Inflammatory medication (NSAIDs) prescribed by your doctor are effective in the early stages.

Once the inflammatory soreness has resolved a physiotherapist can assess posture and lower limb alignment in order to give specific stretching and strengthening exercises to address the underlying cause of the problem. For a insole option, check out the below product...

- Sorbo RX Ultra Orthotic Arch Insole with Inserts offer support and stability to those with a medium or high arch. These replacement inserts are available only to PhysioRoom.com and have been moulded from a long-lasting, durable polyurethane foam for structural support which help to maintain superior shock-absorbing benefits when compared directly to similar products on the market.

- Lauded for their lightweight design, Sorbo RX insoles provide a much cooler and comfortable fit which is why they are the product of choice for Doctors, Sports-Medicine Specialists and Professional Trainers alike. Sorbo RX are proven to help prevent pain and ease the associated symptoms for a variety-of-impact related injuries.
ACHILLES TENDINOPATHY

What is it?

Achilles Tendinopathy is commonly known as Achilles Tendonitis. Achilles tendinopathy is an overuse condition that usually occurs during the running stage of the Triathlon. Typically, it comes on gradually, and is more common in those aged over 40. The pain is located around the back of the heel and just above. This pain is worsened by activity, and the focal areas of tendon degeneration often feels tender to touch. Often the tendon feels very stiff first thing in the morning and the affected tendon may appear thickened in comparison to the unaffected side.

How can you prevent it?

The training load should be monitored carefully as Achilles Tendinopathy is an overuse injury. The intensity, duration and frequency of training sessions must be gradually progressed. Any sudden increases in these variables should be avoided in order to avoid overloading the Achilles Tendon. Stick to a pre-planned training schedule and be sensible regarding the level of event you are entering. If you’re thinking about entering an Ironman event make sure that you have prepared well.

Treatment

The key to recovering from Achilles Tendinopathy is in trying to elicit a healing response by loading the tendon gradually without overloading it. Published research has suggested that recovery is optimised by using a programme which uses ‘eccentric muscle work’. Eccentric muscle work refers to a muscle that is lengthening while contracting - a contraction that occurs during movements such as landing and decelerating. Maximal tension is generated in the muscle during the eccentric contraction and when this is done in a gradually progressive manner, it causes the tendon to adapt and get stronger.

The Aircast AirSport Ankle Brace can be very effective in relieving the heel pain symptoms of Achilles Tendinopathy, check it out below…

• The Aircast AirSport Ankle Brace is one of our bestselling sports ankle braces. It’s lightweight but the comfortable plastic stirrups and Velcro straps provide ankle support and restraint.

• Incorporates clinically proven air-stirrup ankle brace features, such as a semi-rigid shell and AirCells, to provide comfort and support on both sides of the ankle. This can also be very effective in the treatment of a sprained ankle, tarsal tunnel syndrome, ankle instability or following a broken ankle. Automatic heel width adjustment for easy application.

• Additional compression and stabilisation is provided by the ATF (Anterior Talo Fibular ligament) Velcro cross strap and integral forefoot and shin wraps. This compression is very effective in the treatment of a swollen ankle. Once strapped in place this brace limits ankle movement in order to prevent the ankle rolling over.
**SHIN SPLINTS**

**What is it?**

Shin Splints is a misleading term for any general shin pain and most sports medicine professionals try to avoid using it because shin pain and Shin Splints can be due to several different conditions. One of the most common shin conditions that is labelled Shin Splints is Medial Tibial Stress Syndrome.

Medial Tibial Stress Syndrome is common in triathletes, where there is shin pain on the inner side of the shin during running and also following load-bearing activities.

**How can you prevent it?**

The stress on the shins can be minimised by supportive running shoes and adding shock absorbing insoles. As well as reducing the load on the shins, the risk of Medial Tibial Stress Syndrome could be reduced further by addressing problems such as flat feet (excessive pronation) with arch supports.

**Treatment**

Physiotherapy treatment involves rest, strengthening and stretching exercises, and then a gradual return to running once symptoms have resolved. An assessment of body alignment, particularly of the lower limbs, is important to correct faults that may predispose the shins to excessive stress.

A Cho Pat Shin Splint Compression Sleeve is often helpful in alleviating mild shin pain, check it out below...

- The Cho-Pat Shin Splints Sleeve is the professionals’ choice for the treatment of shin splints symptoms. Elasticated shin and calf sleeve with upper and lower Velcro fastening straps
- The elasticated fabric provides gentle support to the entire shin and calf region. This provides reassurance and takes the strain off the painful soft tissues of the shin.
- The upper and lower Velcro fasteners apply additional compression across the muscles and tendons of the lower leg, preventing them from generating their maximum contraction. This reduces the stress on the tendons themselves and the area of the shin that they attach to.
SHOULDER BURSITIS

What is it?

Shoulder pain is the most common upper limb injury in triathletes due to the repeated stresses placed on the shoulder during the swim. Strains of any of the muscles of the shoulder can produce shoulder pain, but Shoulder Bursitis (inflammation of a sac of fluid called a bursa) is most common because it can develop following a small shoulder muscle strain or it can develop independently.

Frequent overuse of the rotator cuff muscles during swimming can cause the bursa to get ‘impinged’ between the muscles and the bony prominence of the shoulder, which causes the bursa to become inflamed. This causes pain during swimming and whenever the arm is raised.

How can you prevent it?

Increases in the amount of swimming training or competition must be gradual so that the tissues of the shoulder are not overloaded. Overuse of the rotator cuff can cause a small inflammatory response and this can worsen if the tissues are not given adequate recovery time. Inflammation of the muscles in the tight space under the tip of the shoulder can cause the bursa to also become inflamed.

It’s important that Triathletes address flexibility, strength and endurance of the shoulder muscles to ensure that they are prepared for the swim.

Treatment

Physiotherapy treatment aims to reduce the amount of inflammation using ice therapy (never apply ice directly to the skin) and this can be helped with anti-inflammatory medication prescribed by a doctor. In some stubborn cases that have failed to respond to rest and anti-inflammatory treatment then a corticosteroid injection may be very effective in relieving the symptoms.

Once the pain and inflammation have resolved, supervised exercises to regain full shoulder movement can begin. These are followed by a gradually progressive strengthening and stabilising programme.

For an Ice Bag option, check the below product…

- The PhysioRoom.com Ice Bag is a handy injury aid that is small enough to fit into any gym bag or first aid kit. Ideal for on-site injuries and direct response, the ice bag allows the user to treat acute or chronic pain and assists in the reduction of pain and swelling during the early stages of injury.

- The Ice Bag is directly filled with either ice cubes, crushed ice or ice water and applied directly onto the wound to reduce pain and swelling. The fabric bag is reusable and moulds to the skin allowing it to be used on most body parts including; the shoulder, elbow, hip, lower back, thigh, knee, calf and ankle.
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