



Sports Injury - Can we prevent it?

(astroturf, road running, cross country), route (hills), equipment etc

In recent years more and more people have been encouraged to participate in sport, both as children and well into adulthood, to help maintain a healthy lifestyle. Those who take part are at risk of sports related injuries which may be serious enough to require surgical intervention and inability to work.

Injuries can result from an episode of direct trauma (a rugby tackle), indirect trauma (a fall when skiing) or they can be of a more insidious onset such as repetitive strain.

Repetitive type injuries:

These include conditions such as Achilles' tendinitis, runners/ jumpers knee, ITB syndrome to name a few, and are the result of repetitive abnormal stress being put through the relevant tissue causing micro-trauma and inflammation. These problems often begin as a niggle which many think will get better on their own, but can progress and become surprisingly incapacitating when chronic.

These types of injuries can develop as a result of various scenarios:

- After taking up a new activity (many people take up jogging in an effort to improve fitness)
- A sudden increase in activity (a leisure runner who decides to train for a marathon).
- A change in extrinsic factors such as footwear, surface

Traumatic injury:

Obviously these injuries can be of varying degrees of severity from a minor muscle strain to a compound fracture or a multiple ligament rupture.

30 years ago a cruciate ligament injury often spelled the end of a professional footballer's career. Some managed to regain stability in the knee and continued to play but often they went on to develop other secondary problems and ultimately severely arthritic knees. Thankfully there has been vast research, development and progress in the diagnosis and management of such injuries however, injuries are still very common and can still have long-term effects.

There are many factors which can influence the development of osteo-arthritis, particularly in our large weight bearing joints (knees and hips), as we get older, but it is now accepted that the three largest risk factors are:

- Obesity
- An occupation or lifestyle which heavily loads the joints
- Previous serious injury

Because cruciate injuries are relatively common and, even with modern surgical techniques, have a long recovery phase, this group has attracted much interest and research.

A few independent groups around the world have discovered that emphasis on certain elements of training can significantly reduce

the risk of cruciate injury in teenagers. After following a set programme over a prolonged period of time they then discovered that the incidence of all lower limb injuries was reduced.

The essence of the prevention programmes is that they should be carried out regularly (3X wk ideally) and should incorporate the following elements:

- Strength training
- Flexibility
- Plyometrics
- Balance, agility & joint awareness
- TECHNIQUE – avoid high risk & vulnerable positions

Although many of these elements are already included in training schedules, it is important to ensure compliance and, crucially, all exercises should be performed with optimum technique thus ensuring that minimal stresses are placed on joints, ligaments and supporting structures.



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