



MARATHON MADNESS

THE MILES TO THE MAGIC

With the London Marathon just weeks away you're likely to be fully into your training programme by now and starting to pick up on the hype and energy that usually surrounds events like these. You're likely to receive a lot of information about your final preparations regarding rest, training, eating, and drinking which can result in a feeling of information overload and with that unnecessary anxiety. The important thing to remember is that you still have time to sort out any injuries or niggles you may be experiencing and you have time to plan ahead for the final week and night before the race so that when the day comes you can really enjoy the experience of the race. We have prepared two articles to help you over the coming weeks.

RUNNING INJURIES

Over the last few decades the popularity of running as a recreational activity has grown exponentially with the introduction of the big city marathons and increased awareness of the health benefits associated with physical activity. Unfortunately with the increase in participation has come an increase in running-related injuries. Studies have shown that the yearly incidence of running injuries is between 37-56%. Between 70-80% of running injuries occur from the knee downwards, the knee itself being the most common site with an incidence rate of between 25 to 42%.

Patellofemoral pain syndrome (PFPS) is the most common injury in running. It is used to describe the complaint of diffuse anterior knee pain, which is exacerbated by running, stair climbing, prolonged sitting and squatting or kneeling. Further associated symptoms include clicking, feeling of giving way and occasionally a small swelling around the knee joint.

Whatever the type or site of the injury, the following points, which have been adapted from the Ten Laws of Running Injuries, described by Tim Noakes in his book *The Lore of Running*, 2001, are invaluable when working through your injury.

1 RUNNING INJURIES ARE NOT AN ACT OF GOD

Injuries that occur in sport fall into one of two groups, they are either caused by extrinsic or intrinsic forces. Extrinsic injuries result when an external force acts on the body, for example a strike from a boxer or a rugby tackle. Intrinsic injuries, on the other hand, result from factors inherent in the body itself and have nothing to do with external traumas. Intrinsic factors include a runner's physical build along with the training environment (including shoes, training surfaces and training methods). The successful treatment of running injuries requires not only treatment of the injury but also identification of the cause of injury and interventions to reduce this cause going forward.

2 EACH INJURY PROGRESSES THROUGH FOUR GRADES

The onset of intrinsic running-related injury is almost always gradual. The injury becomes gradually and progressively more debilitating, typically passing through four stages/grades:

- **GRADE 1:** an injury that causes pain after exercise and is often only felt for some hours after exercise has ceased.
- **GRADE 2:** an injury that causes discomfort, not yet pain, during exercise,

but which is insufficiently severe to reduce the athlete's training or racing performance.

- **GRADE 3:** an injury that causes more severe discomfort, now recognised as pain, that limits the athlete's training and interferes with racing performance.
- **GRADE 4:** an injury so severe that it prevents any attempt at running.

Understanding the distinction in the severity of the injury allows a more rational approach to treatment and for the doctor/therapist to define the athlete's pain and anxiety appropriately.

3 EACH INJURY INDICATES A BREAK DOWN POINT

Once an injury has occurred, it is time to analyse why it happened. This is frequently because the athlete has reached his or her breakdown point usually because of overtraining and not giving the body sufficient time to adapt. It may also be due to a sudden change in training routine, intensity, terrain, or shoes (either new or worn out).

4 MOST TRUE-RUNNING INJURIES ARE CURABLE

Only a small fraction of true running injuries are not entirely curable by simple techniques,



and surgery is only required in very exceptional cases. The majority of runners will return to running pain free provided they adhere to treatment, advice and find the underlying source of the injury.

5 MOST RUNNING INJURIES CAN BE IDENTIFIED WITHOUT THE NEED FOR SOPHISTICATED METHODS OF DIAGNOSIS

Most running injuries affect the soft tissue structures (tendon, ligaments and muscles), particularly those near major joints. These structures do not show up on x-ray. The diagnosis of the majority of running injuries can generally be made with the hands, a thorough history of the athlete's history and training methods, and observation (and correction) of the underlying biomechanical issues. Occasionally an MRI scan may be recommended if the injury can't be clearly diagnosed.

6 TREAT THE CAUSE NOT THE EFFECT

Because all running injuries have a cause, it follows that the injury is unlikely to be cured until the causative factors are eliminated. Remember: 'the runner is an innocent victim of a biomechanical abnormality arising in the lower limb' first treat the abnormality and then, and only then, treat the injury.

7 COMPLETE REST IS SELDOM THE MOST APPROPRIATE TREATMENT

Rest does indeed help alleviate acute symptoms but will never correct the cause of the injury. The only injury that requires complete rest would be one that makes running impossible, for example a stress fracture. A physical therapist will be able to advise you on how much activity you can do while the injury heals.

8 WHEREVER POSSIBLE MAKE SURE YOUR MEDICAL ADVISER IS A RUNNER THEMSELVES

Wherever possible make sure your medical adviser is a runner themselves. Regardless of

“ONE OF THE BASIC RULES OF HEALTH IS, ‘LISTEN TO YOUR BODY.’ I AM RESPONSIBLE FOR MY HEALTH, AND TO RESPOND TO MY BODY, I MUST LISTEN TO IT AND LEARN FROM IT“ (George Sheehan, 1978)

whether your adviser is a medical doctor or physical therapist, ideally they should have first hand experience of running (or at the very least competitive sports participation) and an insight into the complexities of running injuries. They should be able to give advice or refer to other professionals to address the underlying causes of the injury.

9 SURGERY FOR RUNNING INJURIES SHOULD BE A LAST RESORT

Running injuries for which surgery is the first line of treatment include muscle compartment syndromes and interdigital neuromas. Most other running-related injuries shouldn't require immediate surgery. Surgery should only be considered

when it hasn't been possible to treat the injury conservatively ie. without surgical intervention.

10 THERE IS LITTLE EVIDENCE THAT RECREATIONAL RUNNING CAUSES OSTEOARTHRITIS

Osteoarthritis is a degenerative disease in which the articular cartilage lining the bony surfaces inside a joint becomes progressively thinner until the bone beneath the cartilage on both sides of the joint ultimately becomes exposed. It can cause pain and limited joint movement. Modern evidence has shown that if running does indeed increase the risk of osteoarthritis, this occurs only in those more elite athletes who run many miles over their careers.



**KEEP AN EYE OUT FOR OUR NEXT ARTICLE
14 TIPS FOR YOUR MARATHON D – DAY**