



Overuse Injuries in Running – The Basics in Recognition, Treatment and Prevention

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As if all the other adversities that a runner must overcome during training (weather, scheduling time, resisting the urge to procrastinate...) aren't enough, there are almost always insidious injuries which appear at the most inconvenient times! I don't know how many times I've heard: "my knee has been bothering me since I hit the 30 minute mark, but I can't stop now!" or "I was sure that I'd be able to run through it, that it would go away on its own!"

The injuries that many runners experience can be classified as overuse injuries. The pain and discomfort associated with these injuries are usually the result of a combination of biomechanical faults and training error. By biomechanical faults I mean muscle imbalances (muscles that are too tight or not strong enough), misalignments, poor core strength etc. Training errors often occur when you are trying to increase your time, distance or speed too quickly. Footwear is also an important consideration.

The 4 most common running injuries are:

- Iliotibial Band Syndrome
- Anterior knee pain - Patello-femoral Pain syndrome
- Heel Pain – Achilles tendinitis/tendinosis
- Foot Pain - Plantar fasciitis

How to recognize an overuse injury:

- Localized pain or inflammation (pain and swelling, heat or redness)
- The pain or inflammation is worse during or after a run
- The pain or inflammation decreases with rest

What to do about an overuse injury:

- Self treatment - Rest, Ice, Reduce the aggravator (hills, distance). This is often most effective if you catch it in the injury's earliest stages. If your injury has been plaguing you for a few weeks, the effects of this type of treatment are often temporary.

- If this doesn't work, **you must correct the underlying problem**. If you have muscle imbalances or biomechanical faults, these will only become more apparent as you continue to run. Your body may also start to compensate and new aches and pains will start to appear – pain on the opposite leg or low back pain are common signs. **See your physiotherapist for assessment, treatment and advice.**

How to prevent an overuse injury:

- **Cross-train.** Running is a repetitive sport and the more you do, the more repetitive stress you place on your body. The weakest link, so to speak, will break down under these conditions and this is when your overuse injury will appear. Dispersing the stress and strain on your body will help to prevent injury. Cycling is an ideal choice – low impact, great quads and cardiovascular workout. Swimming, strength training, yoga, rollerblading etc. are all great alternatives with good strength, flexibility and cardiovascular components.
- **Stretching.** Making sure you have a good stretching routine which addresses all your muscle groups. Proper technique is especially important. It's best to stretch when your muscles are warm – a good indication of this is when you have broken into a light sweat. Make sure that you don't stretch into pain (overstretch) and that you hold your stretch for 15 seconds. If you're not sure you're doing it properly –ask!
- **Strengthening.** See a qualified fitness instructor for a general strengthening regime using weights. If you have a specific weakness or imbalance, a physiotherapist can help determine the best type of exercise to address this. Also, working on core stability exercises to strengthen the low back and pelvis will improve your ability to withstand an injury. Again, a physiotherapist can assess your level of core stability and prescribe appropriate exercises.

Everyone has a motivation to run, whether it be for fun, health, transportation, competition or all of the above. Everyone has set personal goals of time, distance or fitness. These motivations and goals are why you will find time to run, run through all sorts of weather, push yourself to your physical limits and run through pain and injury. Physiotherapists are in the business of body mechanics; physiotherapists help with injury prevention using their specialized knowledge of biomechanics, anatomy and pathology. All the physiotherapists at Hollyburn Physiotherapy Clinic are here to support you, motivate you and keep you on your feet. Good luck and happy running!

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