

## Knee and Lower Leg Pain

Studies show that foot related postural problems can refer pain to other parts of the body. Knee, leg and foot pain is often the result of abnormal foot function and leg alignment.

Taking a thorough history, assessing which structures around the area of pain are affected and assessing the mechanics of one's feet and legs is vital to help prevent and stop knee, foot, hip and lower back pain. If you have knee pain that you can't seem to get rid of, an assessment by a podiatrist is advisable.

### Some of the common conditions we assess are:

- **Patellofemoral syndrome** – the patellar tendon which connects the muscles of the thigh to the lower leg via the knee cap/patella acting as a pulley, pulling in the wrong direction. The patella thus runs over areas in the knee that it is not supposed to, and eventually this will result in injury and pain. The pain is often felt with bent-knee activity, like squatting and walking upstairs.
- **Osgood Schlatters disease** – this commonly affects teenagers and is an inflammation of the growth plate of the tibia (lower leg bone), which is situated just below the kneecap. It features a painful lump just below the knee with pain usually occurring during physical activity such as running, jumping, squatting and going up and down stairs.
- **Iliotibial band syndrome** – the muscle which runs down the outside of the thigh, and which crosses the knee, is the iliotibial band. With excessive pronation, this muscle shortens over time and is therefore subject to pain and injury. Pain is felt on the outer edge of the knee joint.
- **Flat Feet** - with flat or excessively pronated feet, the result is excessive internal rotation of the lower leg at the same time that the upper leg is rotating in the opposite direction due to forces produced during walking. The knee is the area that therefore must absorb these twisting forces and thus injuries occur.
- **High-arched feet** – high arched or excessively supinated feet, do not allow for the shock absorption needed during walking. The knee must therefore take too much force to absorb this shock and this is when overuse injuries will occur.

### Factors contributing to overuse injuries of the knee may include:

- Poor and/or inappropriate footwear
- Incompatible training programmes and surfaces (hard/soft/uneven)
- Excessive pronation
- Excessive supination
- Genetic disposition

### Treatment for knee pain may include:

- Orthotics
- Foot Mobilisation Therapy
- Tool Assisted Massage
- Trigger Point Dry Needling
- Rehabilitation programs
- Education and advice regarding appropriate footwear
- Training modification guidance
- Taping – Rigid and/or Rocktape

