Anterior Knee Pain

What is it?

Anterior knee pain occurs at the front of the knee and is generally not associated with specific or serious damage to the joint itself.

What causes it?

Anterior knee pain may occur due to abnormal forces going through the knee due to weak, tight muscles about the hip, knee and ankle. Alignment issues can also occur at these joints that contribute to your symptoms. Often this will result in irritation of the knee without specific damage that can be identified on physical examination or investigations.

Specific causes of anterior knee pain can be; softening of the cartilage beneath the kneecap (chondromalacia patellae in adolescents), inflammation of the patella tendon, irritation of the fat pad beneath the knee cap, arthritis or by pinching of the inner lining of the knee with knee motion (synovial impingement).

Symptoms

Symptoms include pain behind the kneecap and on the sides of the kneecap, particularly with deep knee bends, running, walking up or down stairs or prolonged sitting.

What should you do?

Obtain a diagnosis of your problem so you can be advised on appropriate treatment. Treatment will often include stretching exercises for the hamstrings, quadriceps and calf muscles. Strengthening exercises for the muscle that pulls the kneecap toward the center of the body and the muscles around your hips may be prescribed by a sports medicine specialist or physiotherapist. Bicycling or swimming may be substituted for other exercise if they can be done without pain.

Special shoe inserts or orthotics (support devices) may be required to improve the way force is transmitted through your knee to reduce further irritation of your symptoms.

Prevention

Proper warming up before exercise, stretching after warm-up or exercise, and cooling down after exercise can help prevent sports injuries. Specific exercises to help prevent Anterior Knee Pain can be given following a screening assessment to identify where your muscles may be weak or tight.