Osgood Schlatters Disease

The knee joint is comprised of the patella (kneecap), femur (thigh bone) and the tibia (shin bone). The patella acts a pulley with the quadriceps tendon attaching from above and the quadriceps tendon attaching to the tibial tuberosity below. Children and adolescents share the same general knee anatomy as adults, however due to immaturity of their skeletal system they are uniquely vulnerable to bony injury.

Osgood Schlatters is a traction apophysitis meaning there is excessive traction placed upon the tibial tuberosity apophysis (ie. where the patella tendon inserts). This stress is associated with high levels of physical activity during a period of rapid growth. Essentially this overload leads to irritation, pain and if ongoing stress occurs new bone will be laid down (ossification) potentially resulting in a prominent bump. Osgood Schlatters occurs in subjects aged 9-14 years however, it is more common in boys than girls. It often presents in only one leg, yet some studies suggest that it can occur bilaterally in up to 50% of cases (www.thesportsphysiotherapist.com).

Typically children or adolescents with this condition will complain of a dull anterior knee pain that worsens with increased activity levels or sports. The pain can be intermittent and they will often complain of pain when touching or kneeling on the area.

Physiotherapy management involves significant education of the individual and their parents as load management is very important. Treatment will also address the following:

- Biomechanical issues ie. poor technique or movement faults
- Foot posture and appropriate footwear
- Muscle weakness/tightness
- Regular icing for pain relief
- Use of Painkillers/NSAIDs as required
- Taping techniques to unload the area

Osgood Schlatters is a self-limiting condition and with proper management over 90% of cases settle very nicely with conservative treatment.