

Management of Anterior Knee Pain

Introduction

Anterior knee pain is a common problem among adolescents and young adult. The knee joint is composed of several bones, the patella (knee cap), distal femur and proximal tibia. One of the common sites of anterior knee pain is the patello-femoral joint, which is the articulation between the patella and distal femur. Normally, as we bend our knee, the patella will move along the trochlear groove. Any disturbance of the mechanics of patella tracking would contribute to patello-femoral joint pain. It was believed that a combination of factors would contribute, which included muscle imbalance, tight soft tissue structure over the lateral aspect of patella, lower limb malalignment etc. All these would contribute a lateral pull to the patella and the pressure over lateral aspect of patello-femoral joint increased and caused pain.

Symptoms

Pain is perceived over anterior aspect of knee joint. It will exacerbate as you squat or climbing stairs, because the pressure over the patello-femoral joint would increase as the degree of knee bending increased. Pain would be improved with rest.

Diagnosis

Your orthopaedics surgeon would take a detail history and perform a detail examination to establish the cause of pain. Further investigations, e.g. XR or MRI of knee joint may be required.

Treatment

For the treatment of patello-femoral joint pain, in general, symptoms can be improved with activity modification and analgesics. For specific treatment, it would depend on the exact cause of pain, e.g. if there is significant muscle weakness, specific muscle training (medial part of quadriceps muscle) program could be offered. Judicious usage of sports taping (with the help of physiotherapist) would also help in symptoms relief during sports activity. Most of the patients would respond well to non-operative treatment.