

Management of Acute 1st Time Patella Dislocation

Introduction

Patella, also called knee cap, is the bone that is over anterior aspect of your knee joint. Its main function is to increase the mechanical advantage of quadriceps muscle in order to extend your knee joint. Normally, the patella will glide along the trochlear groove as the knee moves from an extended to flexed position. Patella stability is maintained by both bony and soft tissue constrains. Patella dislocation may occur if the soft tissue constrain (medial patellofemoral ligament) is disrupted during injury.

Symptoms

This injury usually occurs with the knee in valgus, hyperextended position or as a direct trauma to the knee. Patient may feel as sense of giving way, followed by immediate knee swelling and pain over anterior aspect of knee. The patella usually reduced spontaneously with knee in extended position or the dislocated patella may lock the knee in a flexed position.

Diagnosis

Diagnosis can be confirmed with clinical examination by physician. On clinical examination, there would be knee swelling, tenderness along the medial retinaculum and the apprehension test would be positive. Depends on the clinical situation, further investigations, e.g. XR or magnetic resonance imaging may be required.

Treatment

Most of the patella dislocations reduce spontaneously, if it is not reduced, it can be reduced by medical personnel by gently extending the knee with the foot in external rotation. Non operative treatment is recommended by most physicians for acute 1st time patella dislocation. It includes initial immobilization in extension brace for several weeks followed by gentle knee mobilization with patella brace. Patient may wean off from patella brace from 6th – 8th week. Physiotherapy is recommended with the aim of regaining range of motion, strengthening of quadriceps muscle and regaining of proprioception. Most of the patients may return to sports in 4-6 months. The recurrence rate ranges from 15-50% for patients treated non-operatively. Surgery is required in 1st time patella dislocation if patient had displaced osteochondral fracture or medial patellofemoral ligament avulsion fracture. You are advised to seek help from the Orthopaedics surgeon if you suffered from patella dislocation.