

Introduction

Patellofemoral joint problems are one of the most frequent complaints in orthopaedics and sports medicine (*Beaconsfield et al 1994*). Current investigations has been directed toward more accurate diagnosis of patellofemoral pain with special attention directed toward assessing patellar alignment and articular changes (*Scuderi 1992*). Patients with patellofemoral malalignment are noted to have subluxation alone, tilt alone, tilt with subluxation or recurrent dislocation (*Fulkerson and Hungerford 1990*). Soft tissue changes associated with recurrent dislocation of the patella include patella alta, generalized ligamentous laxity, laxity of medial retinaculum, hypoplasia of the vatus medialis obliquus, and retraction of lateral retinaculum. Bony abnormalities include a flat femoral trochlea, dysplastic patella, lateralization of the tibial tuberosity, increased femoral anteversion with compensatory external tibial rotation, and genu valgum. The unstable patella is difficult to manage. Over 130 different operations had been described to realign the extensor mechanism but no single procedure has own widespread approval. The procedure currently used are either soft tissue correction, bony procedures or a combination of both. The ideal operation should be based on mechanical principles in order to correct factors predisposing to a subluxation or dislocation. The complications of surgical treatment include osteoarthritis of the patellofemoral joint, loss of flexion, tenderness over screw or staple fixation, detachment of patellar tendon and genu recurvatum after distal realignment before growth is completed (*Dandy and Griffiths 1989*).

Aim of Work

- Fifty patients with a history of patellofemoral malalignment syndromes will be studied.
- Patients with isolated chondromalecia patellae and hypermobile patella will be excluded.
- All patients will be exposed to:
 - 1) Thorough clinical and radiological examination: including plain X ray(A.P , Lateral & Axial views).
 - 2) C.T or MRI when indicated.
- All patients will be treated initially conservatively for 3-6 months.

- **Surgery will be done when: 1)conservative treatment failed to significantly improve the symptoms. 2) when associated pathology such as a torn meniscus or an osteochondral fracture was present. The types of surgical treatment are 1) lateral release, 2)proximal realignment, 3)distal realignment and 4)combined proximal &distal realignment.**
- **Follow up in OPD in 2,4,6,12,24 months, with subjective and objective evaluation of the results.**