CASE REPORT

Intra-articular dislocation of the patella

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INTRODUCTION

Intra-articular dislocation of the patella is a very rare injury. This case report describes this injury in a 17-year-old man who required open reduction with repair of the Quadriceps tendon.

CASE REPORT

A 17-year-old man attended A&E having sustained an injury to his left knee. Whilst playing football, he had struck a metal post with his flexed knee. He had been unable to weight bear since the injury.

On examination his left knee was fixed in eighty degrees of flexion and no active or passive movement of the knee was possible. The patella was palpable in the intracondylar notch. Circulation and sensation were intact.

Radiographs (Fig. 1), demonstrated an intra-articular dislocation of the patella.

Closed reduction was unsuccessful and so open reduction under general anaesthesia was performed. At operation the patella had rotated through almost 180 degrees, so that the articular surface was facing the tibia. The patella was firmly wedged in the intracondylar notch and the Quadriceps tendon was avulsed from the upper pole of the patella. The patella was reduced and the quadriceps tendon reattached by means of vicryl sutures.

Following immobilization in a plaster cylinder for 6 weeks, the knee was mobilized and a good functional result obtained.

DISCUSSION

Intra-articular dislocation of the patella is a rare injury and was first described by Midelfart in 1887 (Donelson & Tomaioli 1979). The dislocation occurs as a result of disruption of one part of the extensor mechanism from the patella. If

Fig. 1. Radiograph demonstrating intra-articular dislocation of the patella.

the quadriceps tendon is avulsed (as in this case), the patella rotates so that the articular surface faces the tibia. If the patella tendon is avulsed then the articular surface rotates to face the femoral condyles.

The mechanism of injury is thought to be as a result of a direct blow to the flexed knee. Most of the case reports describe the injury in children or adolescents. This is most likely due to the lax soft tissue attachments of the patella in the young, a similar injury in adults would probably result in a fracture of the patella (Donelson & Tomaioli 1979).

Closed reduction of this dislocation has been described (Nsouli & Nahabedian 1988), but as in this case the patella is often firmly wedged in the intracondylar notch. Open reduction also has the advantage of allowing accurate repair of the associated soft tissue injury.

REFERENCES

- Donelson R. G. & Tomaioli M. (1979) Intra-Articular Dislocation of the Patella. *Journal of Bone and Joint Surgery* **61-A**, 615–616.
- Nsouli A. Z., Nahabedian A. M. (1988) Intra-Articular Dislocation of the Patella. *Journal of Trauma* **28**(2), 256–258.