

A case of superior dislocation of the patella

Thomas Fridén

A 56-year-old woman with arthrosis of the knee sustained a fixed superior dislocation of the patella from a minor trauma. Closed reduction was performed. Only 3 other cases have been found reported in the literature.

Case report

A 56-year-old woman was admitted with an acute painful locking of the right knee. There was no past history of joint disease except for slight morning stiffness of both knees; she worked full time in a meat market. Two years earlier she had been admitted to the hospital after having bumped her right patella against the steel edge of a counter, which resulted in pain and regional swelling. There was no skeletal injury radiographically and the condition was regarded as a contusion, although the patient described a momentary locking of the joint.

The present trauma was similar, and the patient described a rotating movement of the limb when she bumped the steel counter edge at her job. On

examination a totally fixed patella and a few degrees of hyperextension of the knee was found. The base of the patella protruded anteriorly and was extremely tender.

A superior dislocation of the patella was suspected and radiographs confirmed the diagnosis (Figure 1). The osteophytic apex of the patella was caught behind an osteophyte that had formed in the proximal demarcation of the femoral articular surface. After sedation the joint was manipulated, reduced, and the patient experienced immediate pain relief. Afterwards, there was a full range of motion.

One month later, the patient was free from knee symptoms. Radiographically, she had a

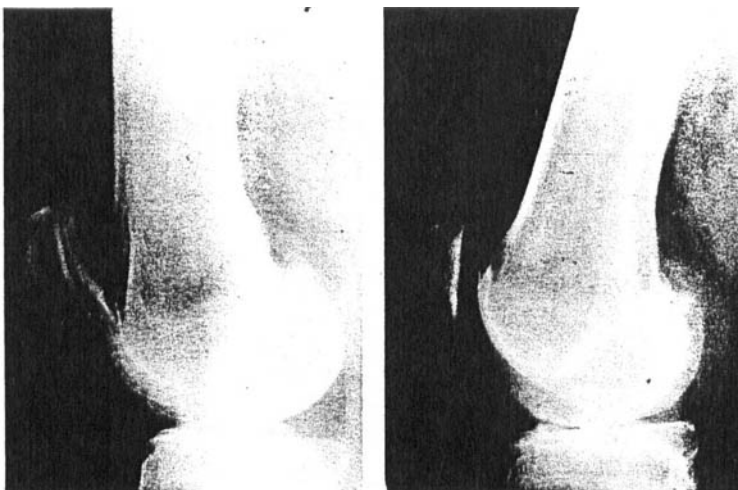


Figure 1. A 56-year old woman with superior dislocation of the patella. Before and after closed reduction.

Grade II medial femorotibial arthrosis (Ahlbäck 1968) and some loss of cartilage in the patellofemoral articulation with osteophyte formation.

Discussion

Dislocation of the patella, mainly laterally, commonly appears in young individuals with joint laxity (Rünow 1982). A rarer condition is the

horizontal rotation of the patella, where some 30 cases have been reported (van den Broek 1985). I have found only 3 published cases of superior dislocation (Watson-Jones 1976, Bartlett 1976, Hanspal 1985), which were all caused by a posteriorly directed force. No complications or disability occurred after reduction in any of these cases. The authors emphasized differentiating the condition from a rupture of the patellar ligament.

References

- Ahlbäck S. Osteoarthritis of the knee. A radiographic investigation. *Acta Radiol (Diagn) (Stockh) (Suppl)* 1968;277:7-72.
- Bartlett D H, Gilula L A, Murphy W A. Superior dislocation of the patella fixed by interlocked osteophytes. A case report and review of the literature. *J Bone Joint Surg (Am)* 1976 Sep;58(6):883-4.
- Hanspal R S. Superior dislocation of the patella. *Injury* 1985 Jul;16(7):487-8.
- Rünow A. The dislocating patella. Etiology and prognosis in relation to generalized joint laxity and anatomy of the patellar articulation. *Acta Orthop Scand (Suppl)* 1983;201:1-53.
- van den Broek T A, Moll P J. Horizontal rotation of the patella. A case report with review of the literature. *Acta Orthop Scand* 1985 Oct;56(5):436-8.
- Watson-Jones R. *Fractures and joint injuries*. 5th ed. Churchill Livingstone, Edinburgh 1976;2:1056.