# Habitual Dislocation Of The Patella

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## Abstract

## CASE

A 27-year-old woman was seen in the emergency department, reporting pain and swelling in the right knee. It was learned from her history that she had distorted her knee while getting off the minibus. She was interested in the folk dance and she had patellar dislocation twice before. On examination, the affected knee was swollen, and there was tenderness over the lateral condyle. It was detected from her direct radiography that she had dislocation of patella (Figure-1).

#### Figure 1

Figure 1: Patella dislocation on the plain knee graphy



After sedoanalgesia, after the extension of right knee, patella was successfully reduced to normal anatomic position by pushing it from lateral to medial. Right long leg splint application she was discharged. Three weeks later, on the control examination it was detected that patella was in its normal location. On the magnetic resonance imaging of knee we detected subchondral contusion of lateral condyle of right femur, and Grade II rupture of right knee medial meniscus posterior horn (Figure-2, 3). In this paper we aimed to review diagnosis and management of patellar dislocation.

#### Figure 2

Figure 2: Subchondral contusion of lateral condyle of right femur on the MRI



#### Figure 3

Figure 3: Grade II rupture of right knee medial meniscus posterior horn on the MRI



### DISCUSSION

Acute patellar dislocation affects the woman more commonly. It is a relatively common problem and most likely caused by indirect trauma (gymnastics, dancing, etc.). However, intercondylar patellar dislocation with a component of vertical axis rotation has only been described in a small number of case reports (1). About 10% of acute dislocations are the result of a direct blow to the medial side.

According to Ofluoglu et al. (2) patellar dislocations are divided into two main groups depending on the location of the patella in the patello-femoral joint. In intra-articular dislocations, the patella remains in its anatomical position and is only rotated around its vertical or horizontal axis. In extra-articular dislocations, the patella is displaced outside the patello-femoral joint. According to this classification, the present dislocation can be classified as an extra-articular dislocation.

The most common dislocation is laterally in the coronal plane  $(_3)$ . Patella is displaced laterally over the lateral condyle, resulting in pain and deformity of the knee. Dislocation is generally towards lateral side and patella joint surface comes over external side of lateral femoral condyle. Because dislocation is mostly reduced spontaneously by extension of the knee, physicians generally do not see the dislocation. History and indirect physical examination help the diagnosis in this circumstance. In 15% of the cases recurrent patellar dislocations are seen. The patella and knee should be x-rayed to rule out a fracture, and the knee should be immobilized after reduction. Follow-up with a primary care provider or orthopedist within 1 to 2 weeks is suggested. Reduction is accomplished following conscious sedation by flexing the hip, hyperextending the knee, and sliding the patella back into place. This results in immediate relief of pain, but further soreness from capsular injury persists for a period of time. Then immobilization is provided by splint. If fracture is accompanying and close reduction is not provided, surgical intervention may be needed then (4,5). Recurrent lateral dislocation of the patella occurs in approximately 15% of patients, and superior, horizontal, and intercondylar dislocations require referral to an orthopedic surgeon for possible surgical intervention.

## CONCLUSION

Recurrent patellar dislocation is very rare. Because our patient was interested in in falk dances and gave it up, we think that atrophy of calf muscles facilitates luxation of patella without a direct rauma knee region.

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