An Unusual Case of Frequent Knee Locking

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Abstract

Frequent knee locking is an incapacitating condition that requires a thorough clinical, radiological and arthroscopic evaluation. The common causes are meniscal injury followed by torn anterior cruciate ligament and osteochondral loose bodies in the joint space. Our case describes an unusual case of frequent left knee locking. After clinical and radiological examinations the provisional diagnoses of medial meniscus tear was done. A diagnostic arthroscopy of the left knee revealed normal meniscus, cruciates and a medial patello femoral plica slipping into the patellofemoral joint causing the locking sensation. The plica was resected. At 6 month follow up there is no recurrence of symptoms.

Keywords: Knee locking; Meniscus; Medial plica; Resection

Introduction

An alar fold exists between the patellofemoral and tibiofemoral joint space both medially and laterally. Hypertrophic alar folds are called plicas. Morphologically there are infrapatellar, suprapatellar, mediopatellar and lateral patellar types of plicas [1], but medial plicas most commonly causes symptoms. Plicas slipping into patellofemoral joints and causing locking symptoms are very scantily reported in the literature. Here we present a case of medial plica causing frequent knee locking sensations and relevant clinical significance.

Case Report

Figure 1: Medial femoral plica slipping into the patellofemoral joint.

35 year old lady presented with one year history of severe occasional pain and locking sensation. She had no definite history of trauma or twisting injury. Physical examination revealed mild swelling on her left knee and medial joint line tenderness. Range of motion was not limited. Clinical examination for cruciates and meniscuses came out to be normal. Radiograph was normal. MRI showed degenerative changes over menisci but no definite tear. Diagnostic arthroscopy was planned after 6 months of conservative treatment and follow up. Both the menisci and cruciates were normal. Thickened medial plica mimicking a fibrotic band was seen on medial aspect of knee impinging on medial edge of medial femoral condyle (Figure 1). Plica was resected (Figure 2). ICRS grade II changes over cartilage on medial femoral condyle seen. Cartilage injury was grade 2 according to Outer bridge classification (Figure 3). Patient was referred to our physiotherapy unit for her quadriceps strengthening. Post operatively the patient experienced complete resolution and no recurrence of symptoms for last 6 months.

Figure 2: ICRS grade II changes in femoral cartilage.
The plica syndrome has been well described, but there is frequent knee locking because of plica that is not much described in literature. So our report illustrates the importance of maintaining a high index of suspicion for the diagnosis of medial plica. It also suggests the fact that in presence of a normal radiological picture, locking of the knee can be due to medial plica which should be kept in mind in differential diagnosis of knee locking.

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