Medial patellar dislocation is a rare condition, which often required surgical treatment.

Learning Point of the Article:

Medial patellar dislocation is a rare condition, which often required surgical treatment.

Conclusions:

The present case report showed the favorable result of surgical correction of a unique case of bilateral non-iatrogenic medial patellar luxation, in the absence of any underlying bony-structural abnormality. No other papers dealing with medial traumatic bilateral patellar dislocation are found in current literature.

Introduction:

Patellar dislocation encompasses the 2–3% of the knee joint injuries, affecting mainly young athletes, with a predilection toward the female gender [1, 2, 3]. Lateral patellar dislocation is by far more common than a medial patellar dislocation. The latter is usually the consequence of previous surgery, such as a lateral release, an excessive medialization of the tibial tubercle, or an over tight medial patellofemoral ligament (MPFL) graft [2, 4, 5]. The purpose of this case report is to describe the surgical management of a rare case of traumatic bilateral medial patellar dislocation in a 15-year-old girl with no previous patellofemoral surgeries.

Case Report:

A healthy 15-year-old girl suffered a first episode of medial patellar dislocation of the left knee as a consequence of a traumatic impact during a skiing accident. In the following 9 months, she reported further eight spontaneous luxation episodes, which resolved after auto repositioning. The patient did not refer to any previous surgery. At the clinical examination, the left patella appeared to be medialized compared to the opposite healthy side; the medial shift test showed a clear tendency toward medial subluxation.

Author's Photo Gallery

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The present case report showed the favorable result of surgical correction of a unique case of bilateral non-iatrogenic medial patellar luxation, in the absence of any underlying bony-structural abnormality. No other papers dealing with medial traumatic bilateral patellar dislocation are found in current literature. Medial patellar luxation was first described by Hughston and Deese in a cohort of patients previously treated with arthroscopic lateral retinacular release associated with vastus lateralis release [4].

Discussion

The present case report showed the favorable result of surgical correction of a unique case of bilateral non-iatrogenic medial patellar luxation, in the absence of any underlying bony-structural abnormality. No other papers dealing with medial traumatic bilateral patellar dislocation are found in current literature. Medial patellar luxation was first described by Hughston and Deese in a cohort of patients previously treated with arthroscopic lateral retinacular release associated with vastus lateralis release [4]. Other cases dealing with medial...
patellar subluxation after failed patellofemoral surgeries are reported in current literature. McCarthy and Bollier reported three cases after MPFL malpositioning and over tightening, associated with the lateral retinacular release [6]. Aksahin et al. reported a case of a 21-year-old male with spontaneous medial patellar instability treated with the imbrication of lateral structures and a patellotibial ligament augmentation [7]. No pathophysiologic explanation for spontaneous medial patellar instability was found in literature [8, 9, 10]. In our opinion, medial instability was due both to the preponderance of the medial structures, especially the vastus medialis, and the inability of the lateral structures to function as a rein, thus limiting medial translation. Surgical correction has shown to be capable to obtain favorable results at a remarkable follow-up of 7 years. Nevertheless, lacking the final follow-up radiographs, to predict the development of patellofemoral osteoarthritis, is the major limitation of this case report. In literature, good to excellent outcomes was reported postoperatively in most of the patients after surgical correction of medial patellar instability.

Unfortunately, unlike lateral patellar dislocation, clear recommendations regarding indications and surgical procedures are still missing.

**Conclusion**

Up to now, no other case series dealing with bilateral traumatic patellar dislocation are reported in literature. The patient underwent a soft tissue procedure in both knees and the results were favorable. The patient declared to be satisfied with the operation.

**Clinical Message**

Medial patellar dislocation is a rare condition, especially in non-operated knees. Surgical treatment is challenging but frequently needed. In the absence of an underlying bone deformity, a soft tissue procedure is usually able to stabilize the patella.

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