The role of medial patellofemoral ligament reconstruction in management of recurrent patellar dislocation: A Systematic Review of literature

A Systematic Review Submitted for Partial Fulfillment

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Mohamed Ahmed Ahmed Mostafa

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List of Abbreviations

CT	Computed tomography
GR	Gracilis
MPFL	Medial patellofemoral ligament
MRP	Medial Retinaculum Plasty
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
ST	Semitendinosus
VMO	Vastus Medialis Obliquus

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Abstract

The patella is positioned within a soft-tissue sleeve that extends from the anterior iliac spines of the pelvis and proximal femur to the tibial tubercle.

Over the last 30° of knee extension, the patella lies outside the bony limits of the femoral trochlea, becoming more dependent on soft-tissue constraints.

Acute patellar dislocation is primarily an injury of active young patients of both sexes, with a higher recurrence rate in female patients. The overall recurrence rate after primary patellar dislocation approaches 40%.

Patients who have a primary patellar dislocation have a 17% recurrence rate, and patients who sustain repeat patellofemoral joint dislocation have a 49% recurrence rate. Surgical treatment is generally recommended after a second dislocation.

The MPFL is often damaged during patellar subluxation or dislocation, and many different MPFL surgical reconstruction or repair techniques have been described in the literature.

Recently, MPFL reconstruction has become a popular treatment option for recurrent lateral patellar dislocations, as this ligament is the primary passive restraint to lateral patellar translation of early knee flexion .

Keywords

Recurrent patellar dislocation , patellar instability , MPFL , medial patello femoral ligament

INTRODUCTION

The patella is positioned within a soft-tissue sleeve that extends from the anterior iliac spines of the pelvis and proximal femur to the tibial tubercle. (1)

Over the last 30° of knee extension, the patella lies outside the bony limits of the femoral trochlea, becoming more dependent on soft-tissue constraints(2)

Acute patellar dislocation is primarily an injury of active young patients of both sexes, with a higher recurrence rate in female patients.(3-6) The overall recurrence rate after primary patellar dislocation approaches 40%. (7)

Patients who have a primary patellar dislocation have a 17% recurrence rate, and patients who sustain repeat patellofemoral joint dislocation have a 49% recurrence rate. Surgical treatment is generally recommended after a second dislocation. (3)

The medial patello-femoral ligament is often damaged during patellar subluxation or dislocation, and many different MPFL surgical reconstruction or repair techniques have been described in the literature. (8-9)

The past decade has seen a change in many centers' surgical approaches to the management of patellar