Arthroscopic Medial Patellar Reefing with Suture Loop for Recurrent Patellar Dislocation in Paediatric Population

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Disclosures

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Introduction

The recurrent patellar dislocation is a disabling condition that affects unilateral or bilateral knees in young and active individual [1, 2]. Recurrence after conservative management is up to 53% [2]. So, the surgical treatments such as proximal realignment or distal realignment or newer techniques like trochleoplasty are the mainstay of treatment [3]. Arthroscopic medial patellar reefing with suture loop with or without lateral release is a minimally invasive procedure to address the recurrent patella dislocation and is being performed since a very long period [2]. And, the procedure is still being popular among surgeons because of its minimally invasive nature and relatively easy procedure [1]. However, the clinical outcome is controversial as compared to the medial patella-femoral ligament (MPFL) reconstruction, because this procedure does not address the MPFL [1, 2, 4].
Purpose of this study is to assess the clinical outcome and rate of recurrence of arthroscopic medial patellar reefing with suture loop in paediatric population with recurrent patellar dislocation.
Materials & Methods

We retrospectively evaluated 84 patients (Male, 31; Female, 53) who received arthroscopic medial patellar reefing with suture loop with or without lateral retinacular release from 2013 to 2017. Inclusion criteria include recurrent patellar dislocation in paediatric population all having 2 or more episodes of dislocation. Exclusion criteria include previous surgery for patellar instability and fracture around the patellofemoral joint. The same surgeon operated all the patients. We used Kujala Score to evaluate the patients.
Results

The mean age of the patients was 16 years (8 to 19 years). The duration of the disease was from 1 month to 11 years, with a mean duration of 9 months. The average number of dislocation was 5.1 times (2 to 21 times). All dislocations were on the lateral side. All cases were followed-up for an average of 24 months (12 to 44 months). The Kujala score improved from 63 points (43 to 88 points) preoperatively to 96 points (86 to 100 points) postoperatively (P<0.001). Seventy-eight patients did not report any dislocation postoperatively. The satisfaction rate was 93%. Six patients reported postoperative dislocation ranging from 1 to 3 dislocations. No other complications occurred.
Discussion and Conclusion

Arthroscopic medial patellar reefing technique does not address the main stabilizing structure of the patella, i.e. MPFL [1, 2]. Despite this fact, it is being performed since a very long period with satisfactory clinical outcomes because of its minimally invasive nature and simple procedure [3]. In this study, we evaluated the paediatric patients undergoing arthroscopic medial patellar reefing with a suture loop with or without lateral retinacular release and found to have satisfactory clinical outcomes with 93% satisfaction. However, the rate of dislocation was 7%. From this report, we can conclude that the procedure is very simple and effective in the paediatric population.
References


