MINIMALLY INVASIVE MEDIAL PATELLOFEMORAL LIGAMENT RECONSTRUCTION WITH FASCIA LATA ALLOGRAFT: MINIMUM 2-YEAR FOLLOW-UP RESULTS

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The ideal medial patellofemoral ligament (MPFL) graft should have anatomic and biomechanical similarities with those of the native MPFL. The literature reports that the native MPFL is a sheetlike ligament.
OBJECTIVE

The aim of this study was to evaluate the efficacy of a new minimally invasive surgical technique for reconstruction of the medial patellofemoral ligament (MPFL) with fascia lata allograft (a sheetlike graft source) at 2-years minimum follow-up.
METHODS

From 2012, 26 MPFL reconstructions in patients with recurrent patellar dislocation were performed at our institute with the above reported new surgical technique. [1] During follow-up 1 patient had a traumatic knee injury; this was not considered a failure and was excluded from the study. Sixteen patients reached 2-year minimum follow-up and were prospectively evaluated (mean follow-up 31.4±8.0 months). Knee function was assessed pre- and postoperative using KUJALA score, quality of life was assessed using SF-12 health survey, pain symptoms were assessed using VAS 0-10. Tegner activity score was used for the evaluation of sports activity level. The functional results were evaluated using the objective IKDC. New episodes of patellar dislocation after the surgery were considered failures. Radiographic measurements of patellar position tilt and signs of osteoarthritis (OA) as well as sulcus angle and Insall-Salvati ratio were also recorded.
The patients were predominantly male (67%). The average KUJALA score increased from 59.2±20.2 to 88.8±7.8 (p<0.05), sf-12 physical health score from 41.8±12.4 to 52.2±8.0 (p<0.05), vas score decreased from 5.1±2.7 (p<0.05) to 2.3±1.6 (p<0.05) and Tegner activity score from 3 (range 2 – 6) to 6 (range 4 – 8) (p<0.05). All patients were classified under grade a at Follow-up. No recurrence was observed, and there was no case of stiffness. Apprehension signs were negative in all patients, patellar tracking was normal in all cases. Radiographic measurements showed no significant changes at all.
## RESULTS

<table>
<thead>
<tr>
<th>Pre And Post-surgery Evaluation</th>
<th>Pre-OP</th>
<th>Follow-up</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>KUJALA</td>
<td>61.2±18.1</td>
<td>86.7±8.7</td>
<td>&lt; .001*</td>
</tr>
<tr>
<td>KOOS</td>
<td>54.5±19</td>
<td>86.8±9.6</td>
<td>&lt; .001*</td>
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<tr>
<td>VAS</td>
<td>5.1±2.2</td>
<td>2.4±1.5</td>
<td>0.001**</td>
</tr>
<tr>
<td>TEGNER</td>
<td>3 [2, 4]</td>
<td>5 [3, 8]</td>
<td>&lt; .001*</td>
</tr>
</tbody>
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*STUDENT'S T-TEST.

**WILCOXON SIGNED RANK TEST**
CONCLUSION

Reconstruction of the medial patellofemoral ligament using fascia lata allograft, alone or combined with other procedures, was technically safe and showed low morbidity and good objective and subjective clinical result in this case series at 2-year minimum follow-up.
REFERENCES


THANK YOU

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