

Comparison of Outcomes After MPFL Reconstruction In Pediatric vs Adult Populations: A Systematic Review



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INTRODUCTION

Medial patellofemoral ligament (MPFL) reconstruction is a common solution to pediatric patellar instability. In the adult population this pathology is encountered less often; but MPFL reconstruction is thought to an equally effective solution.

This study aimed to compare outcomes of MPFL reconstruction in the pediatric and adult populations

We hypothesize that pediatric populations will have improved outcomes compared to adults.

METHODS

- Three large databases were queried using search terms relevant to MPFL reconstruction in pediatric and adult populations
- Results were screened by title, abstract, and full text by two independent reviewers to determine inclusion eligibility.

Inclusion Criteria

- Sample size ≥ 40
- Minimum follow-up \geq two years
- Clinical outcomes reported for individuals <18 or >18 years of age
- Patients were treated with isolated MPFL reconstruction for recurrent patellar dislocations

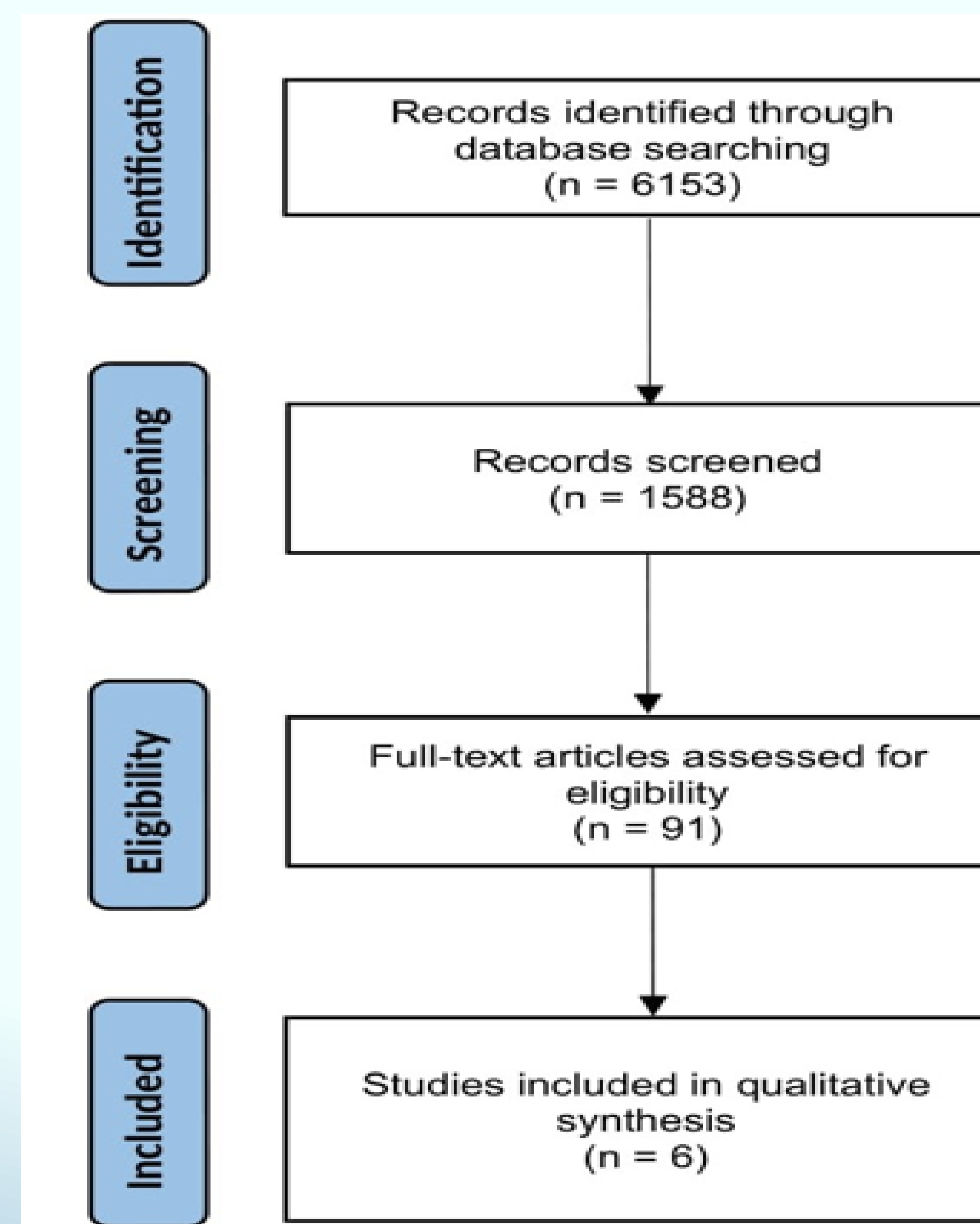
Outcome Measures

- Patient reported outcome scores
- Re-dislocation rates
- Complications
- Stiffness
- Range of motion
- Return to sport

RESULTS & DISCUSSION

- 209 total MPFL reconstructions**
- Pediatric and adult average ages were 14.6 and 25.3 years of age, respectively
- Average follow-up was 41.95 months in both groups
- Pediatric patients had a 20% return to sport rate compared to 100% of adults
- 13% of peds experienced recurrent instability compared to 0% of adults
- There were no significant differences in postoperative PROM's

	Recurrent Instability	Lysholm	Kujala	Stiffness	Return to Sport
Pediatric	13.35%	90.8	89.8	20%	20%
Adult	0%	90.23	90.96	0%	100%



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MPFL reconstruction is an acceptable management strategy in both pediatric and adult populations with recurrent patellar instability

Patient reported outcomes are similar between the two groups; however recurrent instability and stiffness were more prevalent in pediatric populations. Return to sport was seen more frequently in adult populations.