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Outcomes Of Arthroscopic Patella Realignment In Children And Adolescents With A Minimum 2-Year Follow Up

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Disclosure Information

The authors have no disclosures.



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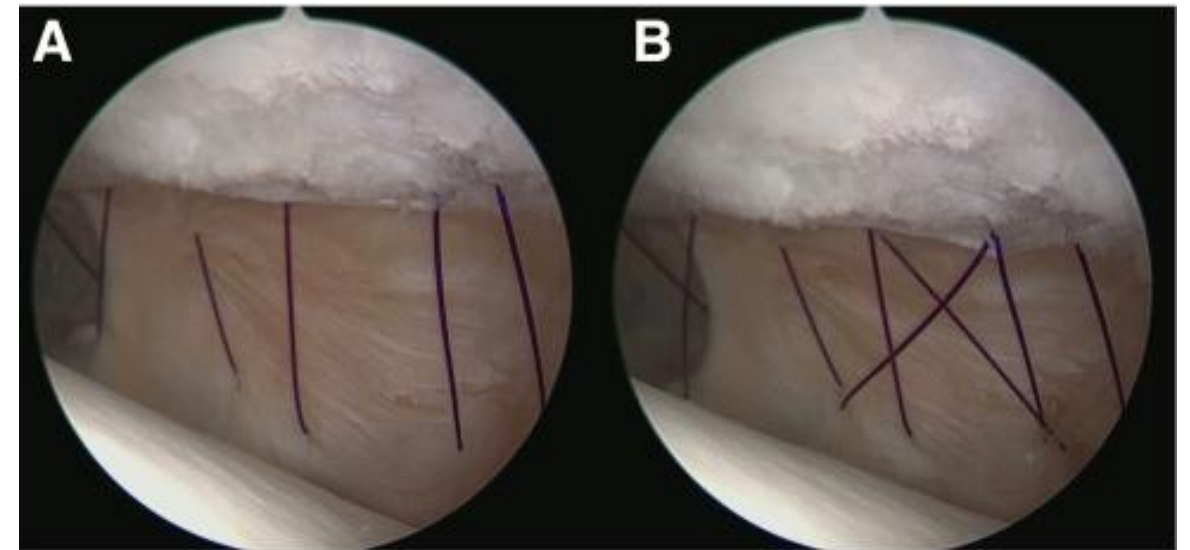
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Background

- Patellofemoral conditions, such as pain and maltracking, have an estimated point prevalence of 28.9% in adolescents. (Smith et al. 2018)
- In cases where non-operative management fails, a diagnostic arthroscopy combined with arthroscopic soft tissue patella realignment technique has been described recently. (Paschos 2024)

Aim of this study:

To analyze the outcomes of arthroscopic intervention for managing refractory patellofemoral conditions in children and adolescents.



(Paschos 2024, PMID:38690340)



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Methods

- **Inclusion:** consecutive pediatric and adolescent patients who underwent diagnostic arthroscopy with arthroscopic soft-tissue patella realignment between 2019 and 2022 with at least 2 year follow up
- **Primary Outcome:** Failure to improve symptoms
- **Secondary Outcomes:**
 - PROMs (IKDC, KOOS, Kujala)
 - Return to sport at pre-injury levels (RTS)
 - Complications



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Results – Cohort characteristics

27 patients

- 70% female (n=21)
- Average age: 15.69 ± 1.82
- Average BMI: 24.55 ± 5.27
- Average length of follow up (months): 29.39 ± 6.33
- Bilateral symptoms: 48.15%
- Atraumatic onset: 55.56%
- Pre-op duration of symptoms (mo): 24.66 ± 19.7
- Documented subluxations: 25.93%
- Sports played:
 - Pivoting, contact: 63%
 - Pivoting, non-contact: 26%
 - Non-pivoting, non-contact: 7%
 - No sports: 4%



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Results – Outcomes

Successful outcome: 92.6%

2 patients with recurrent symptoms

- Complications: 11.1%
 - 3 patients with arthrofibrosis
- Rate of Return to Sport at Pre-op level: 48%
- Patient Reported Outcomes:
 - IKDC: 91 ± 11
 - KOOS: 91 ± 9
 - Kujala: 91 ± 12



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Conclusion

This study demonstrates that **diagnostic arthroscopy and soft-tissue patella realignment** can be a **safe and effective solution** for the management of persistent patellofemoral pain in pediatric and adolescent patients when non-operative management fails.



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References

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- Paschos NK. Arthroscopic Patella Realignment for Children And Adolescents: A Single Incision Technique. Arthrosc Tech. 2024;13(4):102900. Published 2024 Jan 9. doi:10.1016/j.eats.2023.102900



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