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Evolution Of Extraarticular Lateral Tenodesis: Current Perspectives In Primary Anterior Cruciate Ligament Surgery

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Conflict of Interest

- Nothing to disclosure

Introduction

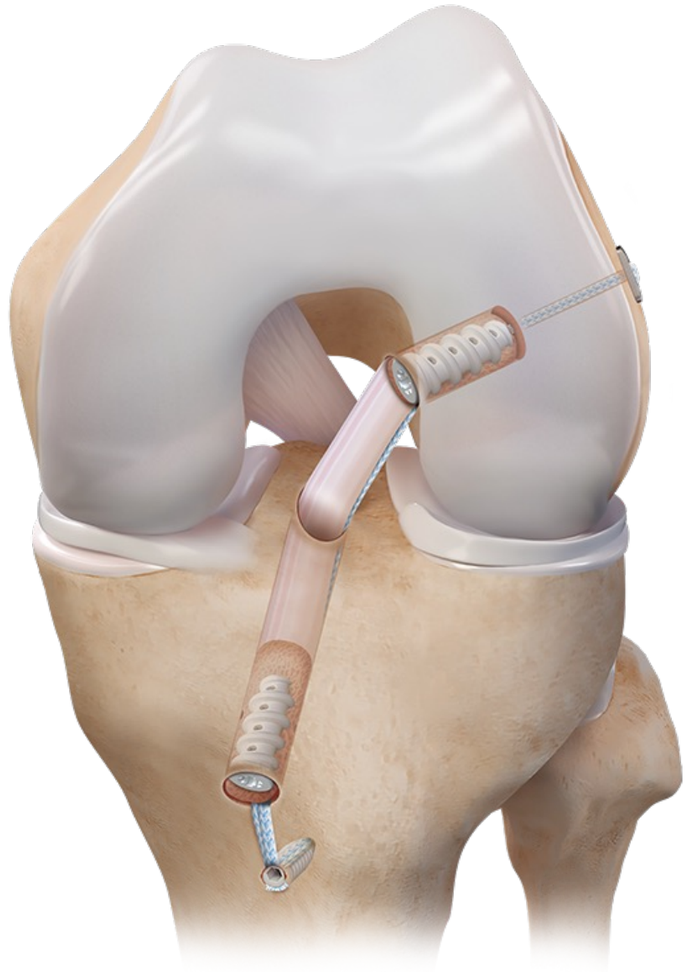
Surgical reconstruction is the gold standard treatment for anterior cruciate ligament (ACL) rupture, aiming to restore normal anatomy, re-establish knee stability, and prevent the development of both meniscal and cartilage pathologies.

This surgery has a graft re-rupture failure rate of up to 6-10%.

Lateral extra-articular tenodesis (LEAT) is a surgical procedure associated with ACLR, which has been reported to significantly decrease failure rates following primary ACL reconstruction.

Objetives

Describe the trend and factors associated with the use of extra-articular tenodesis in ACL reconstruction surgery over the last 5 years in a high-volume national clinical center.



Materials and Methods

Retrospective cohort study.

All primary ACL surgeries performed between 2018 and 2023. Patients older than 14 years who underwent primary ACL surgery were included, and those who underwent revision surgeries, patients with multi-ligament injuries, or associated fractures were excluded.

Descriptive statistics were performed for the variables age, sex, type of graft used, and LEAT performed during surgery. The Prais-Winsten test was used for trend analysis. The Chi-square test was used to analyze the association between sex, type of graft, year, and LEAT. A logistic regression model was constructed with the obtained information.

Results

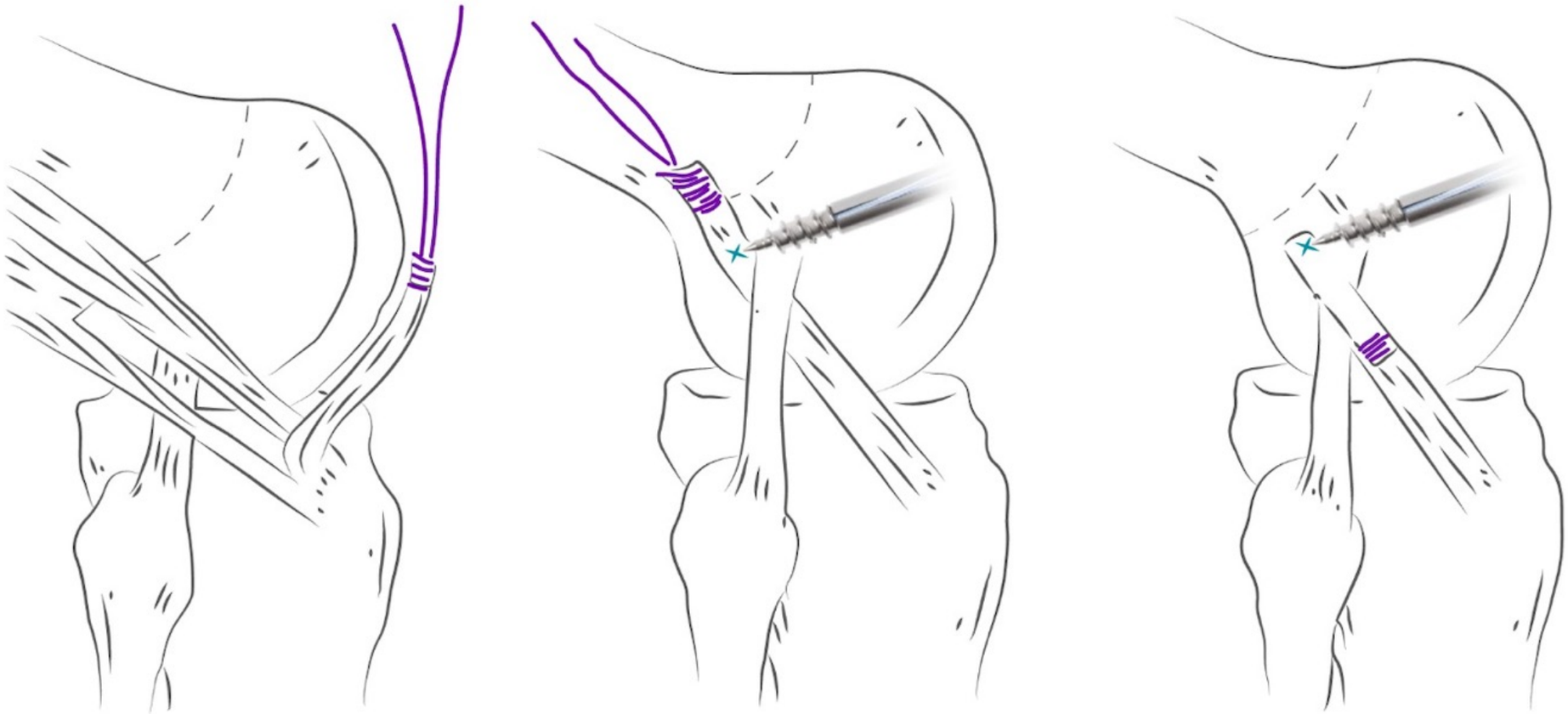
Variable	Value
Age	30.2 Years
Gender (Male)	687 (74.6%)
Graft	Hamstrings (75.1%)

Year	LEAT (%)
2018	5%
2019	8%
2020	10%
2021	27%
2022	17%
2023	30%

Results

Variable	LEAT Association	"p" Value
Age	Significative	**< 0.01**
Gender	N / S	0.360
Graft	N / S	0.235

Surgical Technique



Conclusions

- In our setting, there is a significant upward trend in the use of LEAT in patients undergoing primary ACL reconstruction surgery.
  - Patients undergoing LEAT are significantly younger, more hyperlax, and participate in contact sports.

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