

Trends in Anterior Cruciate Ligament Reconstruction and Return to Sport Among Leaders in the Field: A Survey of the Herodicus Society

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Disclosures

The authors do not have a financial interest or other relationship with a commercial company or institution relevant to this study

Introduction

- Anterior cruciate ligament reconstruction (ACL-R) is one of the most performed and widely researched procedures in sports medicine
- The Herodicus Society is a small society of sports medicine surgeons who are among the most experienced and well-respected in their field
- Their opinions and techniques are widely shared and shape the landscape of current practice



Purpose/Hypothesis

The purpose of this study was:

- (1) To describe the current ACL-R practice preferences amongst members of the Herodicus society
- (2) To determine if these preferences were influenced by time in practice and overall surgical volume

It was hypothesized that:

- (1) There would be a heterogeneous array of responses not associated with surgeon characteristics
- (2) ACL-R preferences would be evidence-based

Methods

- An electronic survey invitation consisting of 24 total questions was distributed through email to all active Herodicus Society members
- Survey results were compiled after a 30-day response period
- Results were then sub-analyzed by years of experience (threshold of 30 years in practice), overall ACL-R annual case volume (threshold of 100 cases)

The following survey asks about your personal preferences and practices regarding ACL reconstruction. While your exact answer may be more nuanced than the options presented, please select the answer that best represents your practices. Your participation is voluntary, and there are no foreseeable risks nor direct benefits for participation. All responses are confidential. The study is being conducted by James Bradley, M.D., and Ian Engler, M.D. If you have questions, please email bradleyjp@upmc.edu or englerid@upmc.edu.

What is your name? (optional)

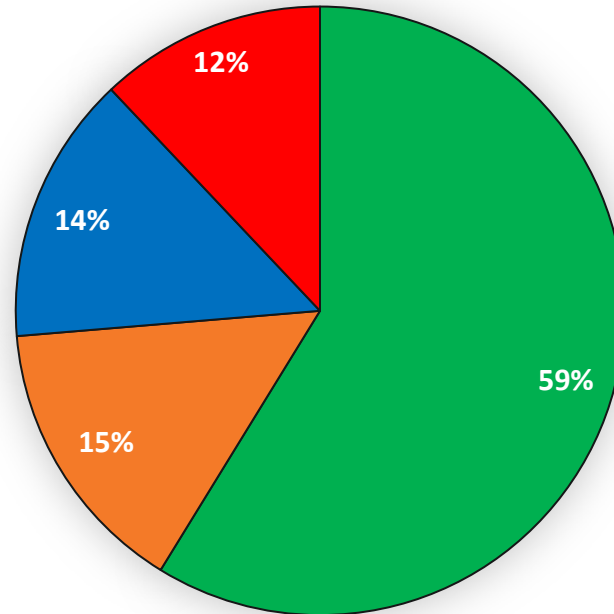
How many years have you been in practice?

What is your practice setting?

Results – Survey Participants

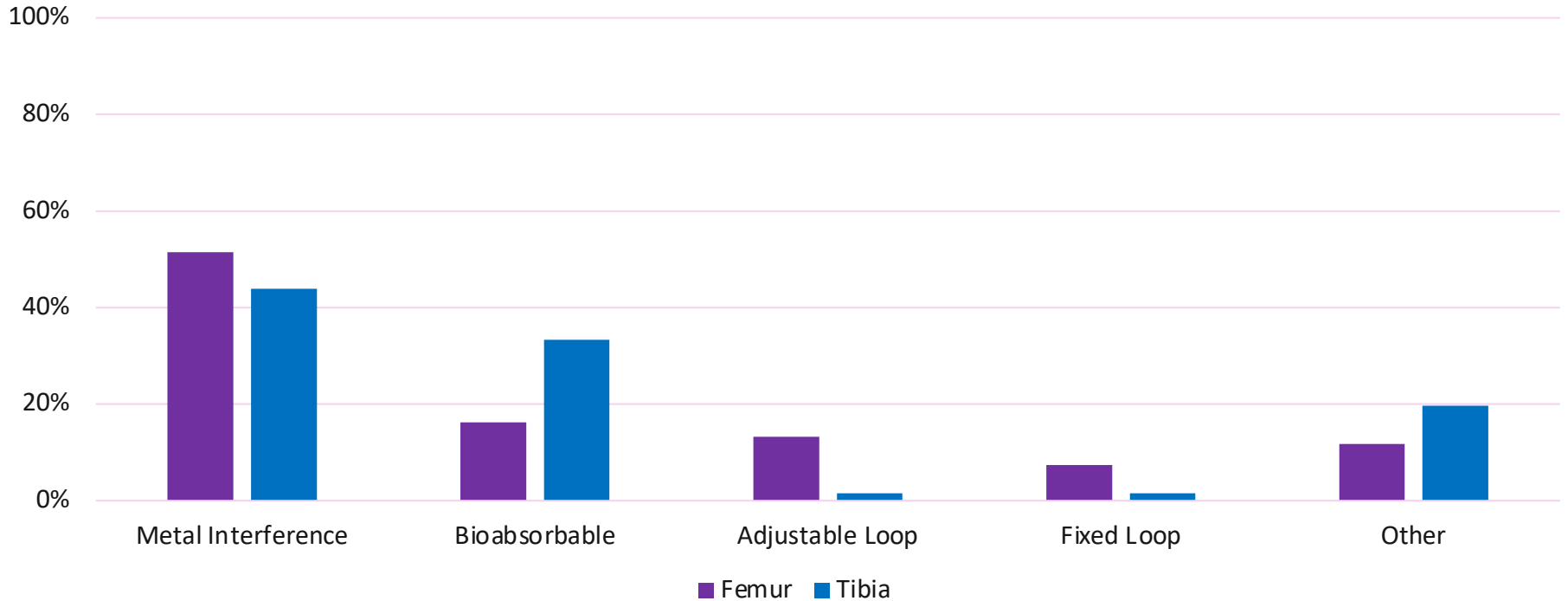
- 69 of the 113 Herodicus Society members who perform ACL reconstructions (61%) completed the survey
- Mean time in clinical practice was 30.9 years
- 85.5% were in an academic or academic affiliated (privademic) practice
- Respondents performed an average of 96.0 primary and 21.6 revision ACL reconstruction annually
- Average of 72.1% of revision cases were performed single-stage

Results – Graft Choice

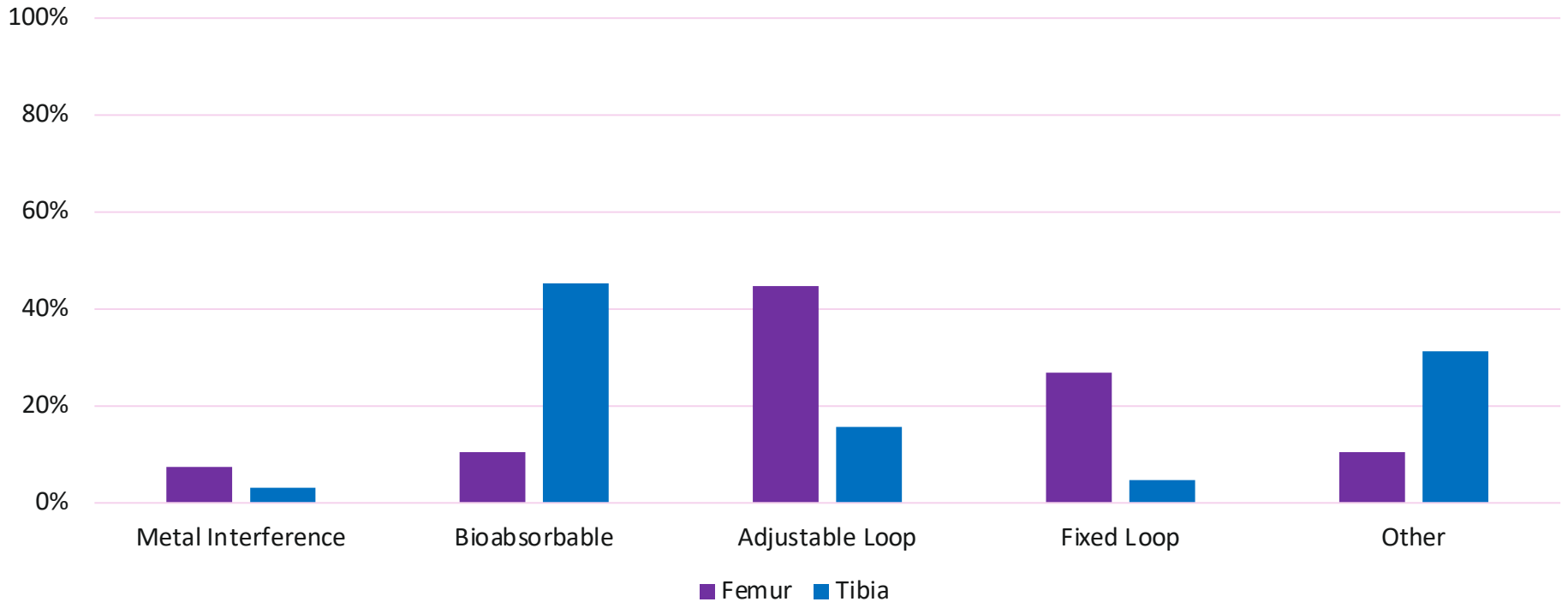


■ Bone-Patellar-Bone ■ Quadriceps ■ Hamstring ■ Allograft

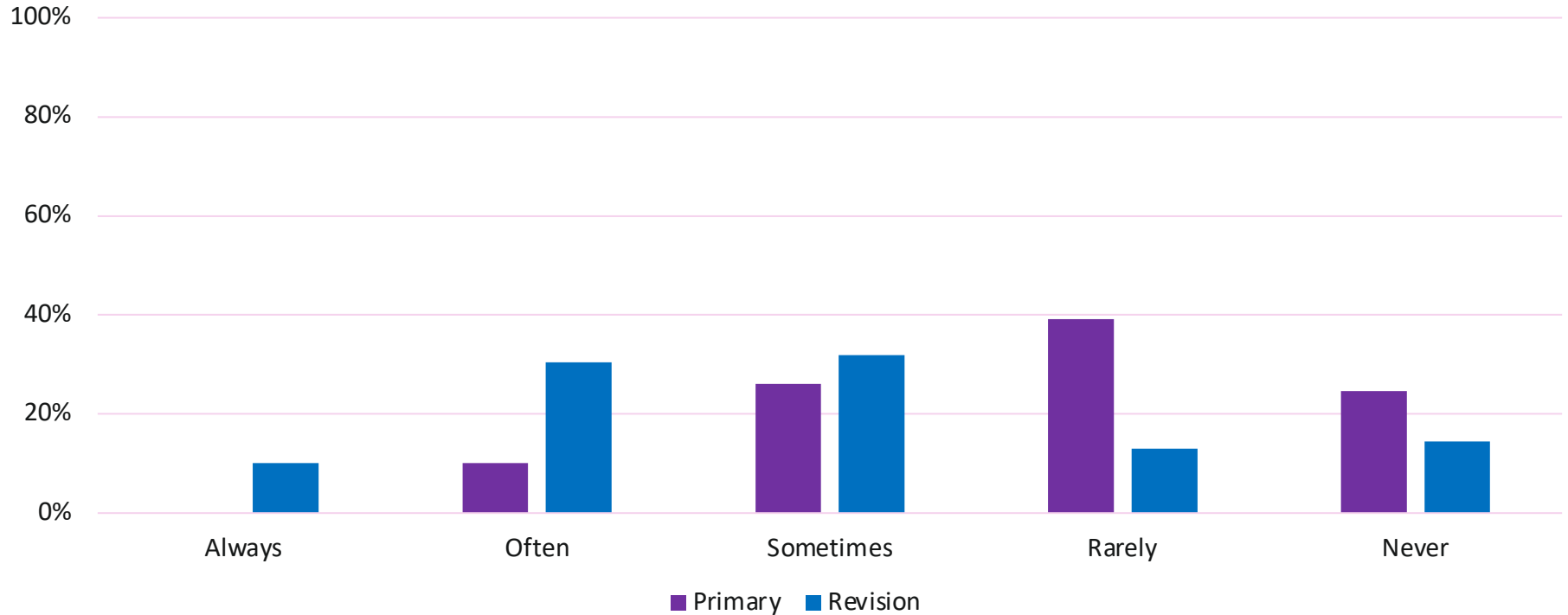
Results – BTB Graft Fixation Technique



Results – Soft Tissue Graft Fixation



Results – Anterolateral Augmentation



Results – Surgical Technique and Rehabilitation

- Majority of surgeons perform lateral extraarticular tenodesis (LET) technique (67.7%) over anterolateral ligament reconstruction (14.7%)
- The most preferred surgical timing of primary ACL-R was within 2-3 weeks of injury (38.2%)
- Most respondents used a combination of time-based and biometric testing to determine return to play (53.6%)
- Higher volume surgeons (greater than 100 ACL-R annually) reported performing single-stage revision ACL-R at significantly higher rate (79.8% versus 62.9%, $p = 0.02$)

Conclusion

- Within the Herodicus Society, a wide range of preferences exist regarding ACL-R surgical technique
- BTB autograft without anterolateral augmentation is the most frequent primary ACL-R graft choice
- In the revision setting, single-stage reconstruction with the possible addition of an LET is most common
- While practice patterns were overall similar, higher volume surgeons perform significantly more single-stage revisions

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