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OBJECTIVES

- Pediatric and adolescent patients are at higher risk for ACL graft re-rupture after surgery than the adult population
- The utilization of allograft tissue in the young, active population has been associated with higher rates of graft failure
- Yet, there has been limited comparison in this population between hamstring (HM) and bone-tendon-bone (BTB) autografts
- *The purpose of this study was to compare outcomes, particularly re-tear and re-operation rates, in adolescent patients undergoing BTB vs. HM autografts*

METHODS

- *A consecutive series of adolescent patients who underwent ACL reconstruction with either BTB or HM autografts was reviewed over a 7 year period*
- Patients were excluded if they had allograft only reconstruction or had less than 9 month follow-up
- Age, gender, graft size, concurrent procedures, high-risk sporting activity, post-operative non-compliance, re-tear rate, re-operation rate, and total follow-up were collected

RESULTS

- 271 patients were identified (220 HM, 51 BTB) with a mean follow-up of 2.0 ± 1.1 yrs
- **Hamstring patients had a trend towards a younger mean age (HM 15.7 ± 4.1 yrs vs. BTB 16.7 ± 1.3 yrs, $p = 0.07$)**
- Mean hamstring graft size was $8.3 \text{ mm} \pm 0.6 \text{ mm}$, BTB graft always 9 mm
- **No significant difference in re-tear rates (HM 8.6% vs. BTB 5.9%, $p = 1.00$)**
- **Trend toward high re-operation rate in HM (HM 15.5% vs BTB 7.8%, $p = 0.70$)**
- Additional procedures listed in Table 1

CONCLUSION / DISCUSSION

- No differences were associated between HM and BTB groups in terms of re-tear rates
- A trend towards more re-operation rates was seen in the HM group
- The optimal graft choice for this population should be a shared decision between surgeon and patient
- Further multi-center study is necessary to see if these trends hold true

	HM	BTB
Revision Reconstruction	19	3
Medial Meniscus Repair	4	1
I+D	3	0
Cyclops Debridement	2	0
Removal of Hardware	3	0
Manipulation	3	0

Table 1. Repeat operations in HM vs. BTB groups

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