ACL RECONSTRUCTION USING QUADRUPLED HAMSTRING TENDON GRAFT: COMPARISON OF TWO TYPES OF SOFT TISSUE FIXATION

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INTRODUCTION

✓ Quadrupled hamstring tendon autograft is a very strong ACL reconstruction graft sparing the extension mechanism.

✓ The results of this type of reconstruction are comparable to those using BPTB.

✓ We are presenting the results of arthroscopic ACL reconstruction using hamstring autograft and compare two types of soft tissue fixation.
PATIENTS- METHODS

Time period: March 1999- December 2000

Groups A & B

Patients: 146

Reason for reconstruction: chronic ACL deficiency

Procedure: Arthroscopic ACL reconstruction using quadrupled hamstring tendon autograft

Gender: male

Age: 19-37 years
Group A
Patients: 87

Type of graft: Quadrupled semitendinosus-gracilis autograft

Type of fixation: special soft tissue fixation device (Mark II, Surgicraft, UK)

* femur: over the top & bollard fixation
* tibia: tunnel & bollard fixation
Group B
Patients: 59

Type of graft: *Quadrupled semitendinosus-gracilis autograft*

Type of fixation: *special fixation system*  
* (Endobutton, Smith & Nephew)  
* femur: tunnel & endobutton  
* tibia: tunnel & interference screw*
EVALUATION

- IKDC
- Lysholm-Tegner scale
- Total subjective evaluation
- Hop test - Hop Index - Vertical Jump Test
- ROM
- Symptoms
- Sokinet evaluation
- Pivot shift
- Lachman test
RESULTS

There was no significant difference between the two fixation methods.
CONCLUSION

Both techniques proved to be safe, effective and reproducible in restoring knee function with minimal donor site morbidity. The procedure during which the autograft was passed and fixed in the femur at the “over the top” position using Mark II fixation system seems to be more time saving, avoiding many of the problems of the through-the-tunnel positioning.
REFERENCES
