

# **Repeat Meniscus Repair**

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# Introduction

- **Repair of suitable meniscus tears has repeatedly been shown to be successful in a high percentage of cases (80-95%)**

# Introduction

- **Virtually no information available in the literature to guide decision making when presented with a return meniscus that is still suitable for repair**
- **AANA 2000 paper (Cannon, et.al.)**

# Introduction

- **Purpose of this report is to share our experience to date with repeat repairs**
- **Hypothesis-outcomes are similar to primary repairs**

# **Materials and Methods**

- **18 Consecutive patients 1987-1998**
- **17 Senior author**
- **All available for study at 3 to 11 years  
(ave 7)**

# Materials and Methods

- **History and physical**
- **KT-1000**
- **Lysholm II score**
- **Tegner score**
- **IKDC rating**
- **Weight-bearing X-Rays**

# Results

## Initial Repair

- **Average age 23 (11-40)**
- **11 Lateral, 7 Medial**
- **ACL Tears 8 (44%)**  
**ACL reconstruction 5**
- **Initial repair done by senior author 12**

# **Results**

## **Initial Repair**

- **All patients had symptom free period of time with subsequent reinjury with one exception (2 months)**
- **Mean duration of initial repair 3.5 years (2 months-14 years)**

# **Results**

## **Repeat Repair**

- **Average age 26 (12-42)**
- **Followed 3-11 years (Ave 7)**
- **Lateral meniscus retears**  
**6 of 11 in different sites**
- **Medial meniscus retears**  
**3 of 7 in different sites**

# **Results**

## **Repeat Repair**

- **Retears after repeat repair 5 (28%)  
(2, 15, 19, 35 months, 6.7 years)**
- **4 of 5 with significant trauma**
- **Four had partial meniscectomy, one a third repair**

# Results

## Repeat Repair

- Lysholm score            82 (38-100)
- Tegner score            5.6 (2-8)
- KT-1000
  - Stable (<3mm)            7
  - Nearly stable (3-4.5mm)    2
  - Unstable (>5mm)           1
  - Bilateral ACL            4
  - (-2mm, -3mm, -3mm)

# Results

## Repeat Repair

- **IKDC**

<b>Grade A (Normal)</b>	<b>5</b>
<b>Grade B (Nearly Normal)</b>	<b>6</b>
<b>Grade C (Abnormal)</b>	<b>3</b>

# **Radiographic Data**

- **10 patients over 5 years after repeat repair**
- **Weight-bearing views both knees in extension and 45 degrees flexion**
- **Read blindly by Musculoskeletal radiologists**

# Radiographic Data

- **Grade 0 (normal) 5**
- **Grade I (sclerosis, 1-2 mm) 5**
- **Grade II (3-4 mm) 0**
- **Grade III (>4mm) 0**

# Discussion

- **No deviation from current indications for primary meniscus repair-  
Vertical-longitudinal  
Within vascular zone  
Greater than 10 mm in length  
Intact meniscus body**
- **Standard suturing techniques utilized**
- **Same aftercare protocol**

# Conclusion

- **72% survival rate at 7 years is somewhat lower than reported in most studies of primary repair of similar tears**

# Conclusion

- **Repeat repair of suitable menisci can successfully provide relief of symptoms and allow most patients to return to strenuous levels of function**



