

## Meniscal Suture: Is Debridement Necessary?

Jean-Yves Jenny, Prof., FRANCE  
Nicolae Hazaparu, MD, FRANCE  
Jérémy Besse,

University Hospital Strasbourg  
Strasbourg, FRANCE

### Summary:

Debridement of the suture zone may have little impact on meniscal healing after suture.

### Abstract:

**INTRODUCTION:** Suture of meniscal lesions is currently recommended because meniscal healing allows better knee function and protects against post-meniscectomy osteoarthritis. The debridement of the suture zone prior to performing suture is generally recommended to enhance vascularization and increase the healing potential. However, this procedure has never been formally validated. The hypothesis of this study was the lack of meniscus debridement did not increase the risk of reoperation for meniscus injury when compared to the figures published in the literature.

**MATERIAL:** 72 patients were operated by two senior surgeons experienced in arthroscopic knee surgery for suture of a meniscal lesion, either isolated (44 cases) or during reconstruction of the anterior cruciate ligament (ACL) (28 cases). These were 61 men and 11 women with an average age of 29 years. The sutures were performed from inside to outside with a specific material (FastFix<sup>®</sup>, Smith-Nephew, London, United Kingdom) by simple suture of the lesion without debridement with a stitch every 5 to 10 mm. When indicated, ACL reconstruction was performed with a 4-fold semitendinosus autograft.

**METHODS:** Patients were re-interviewed by telephone or mail about the need for a subsequent reoperation for treatment of a lesion of the same meniscus. The IKDC, Lysholm and Tegner questionnaires were also filled up. The survival rate of the repaired meniscus was calculated using the actuarial method and compared with the rates reported in the literature.

**RESULTS:** 2 patients were lost of follow-up before one year. All other patients were followed for at least one year, and 52 could be re-interviewed for this study. Follow-up time was 1 to 5 years. 12 patients underwent reoperation for meniscus injury after a period of 6 months to 4 years. The survival rate of meniscal repair at 4 years was 81%. It was not possible, due to lack of power, to detect an influence of the medial or lateral location of the repair or the influence of concomitant ACL reconstruction.

**DISCUSSION:** The absence of debridement of the meniscal suture zone did not seem to have a negative influence on the meniscal healing appreciated by the reoperation rate. The failure rate of the present study does not seem to be different from previous studies where debridement was performed prior to meniscal suture. The debridement of the meniscal suture zone is justified by theoretical considerations that may not be confirmed if in clinical practice.

**CONCLUSION:** The completion of a validation on a larger scale of the interest of the debridement of lesion prior to meniscal suture is desirable.