

**#2952** - Clinical Study / Posters

## **In ACL Partial Injury Can The Sparing Of Intact Bundle Get Benefits To A Population Of Sports Patients? Retrospective Analysis Of Two Surgical Techniques Compared**

Orthopaedics / Knee & Lower Leg / Joint Preserving Surgery & Soft-tissue Repair

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### **Background**

Most of the techniques described in the literature for the repair of chronic partial ACL tears, don't spare the intact portion of the ligament

### **Objectives**

Aim of this study was to perform a retrospective analysis of the results obtained from the same ACL reconstructive surgical technique applied by sparing or not AM bundle in a population of 31 sports patients.

### **Study Design & Methods**

From 2011 to 2013 31 patients who suffered ACL partial tear injury with rupture of posterolateral (PL) bundle were randomly divided in 2 groups homogenous for sex, age and sport level activities. The first group (A) with 17 patients performed ACL reconstruction with ST-GR over the top technique sacrificing the anteromedial (AM) remaining bundle intact otherwise the second group (B) with 14 patients performed the same ACL reconstruction using only ST and maintaining AM bundle. All the patients were followed up by MRI evaluation at 12 months and clinical evaluation with IKDC score, Tegner score at 6,12,24,36,48 and 60 months. KT-1000 instrument were performed at 12 months. The results were analyzed statistically to evaluate differences between the 2 groups in term of subjective outcome and stability and for all the tests  $P < 0.05$  was considered significant.

### **Results**

We didn't observe any failure at final follow up. IKDC subjective score at final follow-up in group A was  $90.1 \pm 2.7$  in group B was  $91.2 \pm 2.3$ . Tegner score at final follow up was  $7.2 \pm 2.1$  for group A and  $7.8 \pm 1.8$  for group B. Arthrometric evaluation performed with KT-1000 at final follow-up showed a side to side difference of  $1.4 \pm 1.3$  mm in the A group against  $0.9 \pm 0.7$  mm in the B group. Return time to the sport was 7,1 months for group A otherwise 6,2 months for the group B.

### **Conclusions**

Both the described techniques in this study demonstrated to be able to guarantee a successful outcome. However, although no statistically significant differences were evident in term of subjective and objective outcome between these techniques some evident benefits were evident using the sparing bundle technique in group B such as better clinical scores at the final follow-up and an earlier return to sport activity