

## Proper Surgical Method of Posterolateral Rotatory Instability of the Knee

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### Introduction

Posterolateral corner injury is usually combined when other cruciate ligaments may be also injured and is overlooked frequently because of the difficulty of the diagnosis. But, after surgery is performed only for the cruciate ligament, many reports indicate that the reconstructed ligament becomes lax in the long term follow-up. We report these indications, the reconstruction method according to the severity of the injury and the results of posterolateral reconstruction.

### Material and Methods

Between January 1998 and August 2002, eighty five patients have been operated on because of posterolateral rotatory instability (PLRI) (twenty nine patients among two hundred fourteen ACL reconstruction patients, fifty four patients among eighty four were PCL tensioning and anterolateral (AL) bundle reconstruction patients, and two isolated injury patients). Fifty six patients have been operated on by using the tibia tunnel method, fourteen patients using fibula tunnel, two patients using both tibia and fibula tunnel, three patients using Clancy biceps tenodesis, three patients using Hughston and Jacobson, and nine patients using posterolateral corner repair. The materials were included the patients who had followed-ups for over 2 years and the patients assessments were done by clinical score and dial test.

### Result

Six patients that had the Clancy biceps tenodesis and Hughston and Jacobson methods performed all had poor outcomes, thus revision operation was performed using the tibia or fibula tunnel method. Through our results, the fibular tunnel turned out to be superior compared to the tibia tunnel method.

### Conclusion

Constant suspicion of the posterolateral complex injury is very important in order to have an accurate diagnosis of posterolateral rotatory instability combined with cruciate ligament injuries. The surgical technique that passes the modified posterolateral corner sling through the fibula head tunnel may provide good clinical results in grade II PLRI. It is necessary to reconstruct both tibia and fibula tunnel in grade III PLRI. When there is combined varus instability, a positive result may be obtained if an additional LCL reconstruction is performed.

**Key word:** Posterolateral rotatory instability, Posterolateral corner sling