

# The Antero-Lateral Ligament of the Knee

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CC-BY 4.0**Introduction**

In the year 1879 [1], Paul Segond mentioned about the Anterolateral Ligament (ALL) for the first time in orthopedic literature. It eventually was named by Vieira et al. [1]. There have been anatomical studies that have been conducted to describe the exact origin, insertion parameters and their path, since the year 2012. We identified four anatomical studies that have focus specifically on the ALL.

The origin of the ALL is in the lateral femoral condyle, slightly anterior and distal to the origin of the Lateral Collateral Ligament (LCL) and in the plane between the LCL and the popliteal tendon. It follows an oblique path anteriorly and inferiorly to the tibia, inserting on to the lateral meniscus and on to the lateral tibial condyle just below the chondral surface of the lateral tibial condyle.

An association of ALL and ACL injuries and its etiology in the rotatory instability was proposed by Monaco et al [3].

The parameters specific for radiological visualization of ALL with MRI scans have been cited by a few authors. However the complete demarcation of the structure is not always possible which is probably due to the lack of recognition of the ligament.

The characterisation of the ALL has been done successfully in recent anatomical studies [1,4]. The origin in the lateral femoral chondral and insertions [4] being identified in cadaver. Various studies have demonstrated the bifurcation point clearly demonstrated. There have also been variations in the origin and insertion attachments as published in a study by Vincent et al [2].

There are very less studies showing the ability of MRI ability to pick up ALL in patients. Partly because of the lack of recognition of the clinical significance of ALL until recently. The study in progress attempts in visualisation of the ALL in all the knees using a routine 1.5 - T MRI. The challenges include the ability to visualise the ligament a separate entity in the already crowded lateral aspect of the knee!

There has been a lot of interest focused following the recent description of the anterolateral ligament of the knee. The knowledge of its anatomy and function has lead to much better understanding of its role in the rotatory control of the tibia in the injuries to the anterior cruciate ligament. Reconstruction of this Antero-Lateral Ligament (ALL) is definitely set to become an important step during anterior cruciate ligament reconstruction.

**Conclusion**

The major challenge is in the preoperative assessment of this ligament which is yet to defined. Reproducibility of Clinical assessment of rotatory laxity has been poor. This makes identification of the ligament through investigations a top priority in helping identifying, delineating and diagnosing the anterolateral ligament injury. The MRI stands as the best possible investigation in identifying soft tissue images in the and around the knee.

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