

Anatomical study of the anterolateral ligament of the knee: prevalence in embalmed cadavers

Leif Ericksen DO '26¹, Donald Matz PhD¹

¹Des Moines University, Des Moines, IA

The anterolateral ligament (ALL) of the knee was first referenced by a French surgeon in 1879 but was not referenced in anatomical literature until 2013. Studies on it have increased significantly the last 2 years. The ALL is a deep ligament on the lateral aspect of the knee. There is some discrepancy about its origin. Most agree that it is anteromedial to or under the origin of the lateral collateral ligament (LCL) sharing fibers on the lateral femoral epicondyle. The ligament courses obliquely in an anteromedial direction fanning anterolaterally distally. It has been described as attaching on the tibia between Gerdy's tubercle and the LCL insertion on the fibula. Along its course, the ALL has an attachment to the lateral meniscus which makes it a possibly significant structure in orthopedics. Also relevant for orthopedic surgery is the growing evidence that the ALL has a significant role as a secondary stabilizer to the anterior cruciate ligament. Since its discovery, there have been various studies that have explored the prevalence of the ALL in the general population. Cadaveric studies done in Japan, India and Belgium have found the percent prevalence of the ALL in their cadaveric studies to be over 90%. Shetty et. Al. from India described four different shape variations including cord, band, mixed and Y-shaped types. This study looked specifically for the cord type in 70 preserved knees. A distinct ALL in 37 knees for a prevalence of 52.86%, compared to 69.04% in the study from Shetty et al.