

# ***KNEE LIGAMENTS: Clinical examination with Lelli Test***

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Physical examination of the knee. A review of the original test description and scientific validity of common orthopedic tests.

The clinical diagnosis of an anterior cruciate ligament (ACL) tear is based on 3 tests: anterior drawer, pivot shift and Lachman.

The latter is the most commonly used test. The “Lelli test” is a new clinical test that was first described by Lelli in 2014.

Objectives: To present the original descriptions of common orthopedic physical examination maneuvers of the knee and then to review the literature to support the scientific validity of these tests.

Physical examination is essential in the diagnosis of any medical problem, including musculoskeletal pathology. Given the large number of patients who consult physicians because of musculoskeletal complaints, it is important that physicians truly understand how to perform the various musculoskeletal tests that are commonly used in clinical practice and that they understand the significance of the test results.

In general, chronic, complete tears were most successfully diagnosed but acute, partial tears were least successfully diagnosed. The Lelli Test is more sensitive to correctly diagnosing both acute and partial tears of the ACL compared with other common manual tests.

The clinical relevance is that some ACL ruptures may be more accurately diagnosed.

- Validity of the lever sign test for the clinical diagnosis of anterior cruciate ligament tears: Assessments in ski resorts.

Bucher C, Lamy D, Debaty G, Pailhé R, Saragaglia D. *Orthop Traumatol Surg Res.* 2022 May;108(3):103254. doi: 10.1016/j.otsr.2022.103254. Epub 2022 Feb 17. PMID: 35183758

- A modified anterior drawer test for anterior cruciate ligament ruptures.

Zhao GL, Lyu JY, Liu CQ, Wu JG, Xia J, Huang GY. *J Orthop Surg Res.* 2021 Apr 14;16(1):260. doi: 10.1186/s13018-021-02381-x. PMID: 33853620 Free PMC article.

- Critical Analysis of the Lever Test for Diagnosis of Anterior Cruciate Ligament Insufficiency.

Massey PA, Harris JD, Winston LA, Lintner DM, Delgado DA, McCulloch PC. *Arthroscopy.* 2017 Aug;33(8):1560-1566. doi: 10.1016/j.arthro.2017.03.007. Epub 2017 May 9. PMID: 28499922

- The "Lever Sign": a new clinical test for the diagnosis of anterior cruciate ligament rupture.

Lelli A, Di Turi RP, Spenciner DB, Dòmini M. *Knee Surg Sports Traumatol Arthrosc.* 2016 Sep;24(9):2794-2797. doi: 10.1007/s00167-014-3490-7. Epub 2014 Dec 25.

