Validity of the thessaly test in evaluating meniscal tears compared with arthroscopy: a diagnostic accuracy study.

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Abstract

Study Design Diagnostic accuracy study.

Objective To evaluate the diagnostic accuracy of the Thessaly test compared with an arthroscopic examination in patients with suspected meniscal tears. Background The Thessaly test was introduced to improve the diagnostic accuracy of the clinical examination in detecting meniscal tears. This test appears to be a valuable alternative to other meniscal clinical tests usually performed, but additional diagnostic accuracy data are required.

Methods Patients with suspected meniscal tears, referred to a hospital for arthroscopic surgery, were eligible. The Thessaly test alone and the combination of the Thessaly and McMurray tests were considered as index tests, and arthroscopy was used as the reference test. Experienced physical therapists performed the Thessaly test at 20° of flexion and the McMurray test for both knees. The physical therapist was blinded to patient information, the affected knee, and the results from possible earlier diagnostic imaging. An orthopaedic surgeon blinded to the clinical test results from the physical therapist performed the arthroscopic examination.

Results A total of 593 patients were included, of whom 493 (83%) had a meniscal tear, as determined by the arthroscopic examination. The Thessaly test had a sensitivity of 64% (95% confidence interval [CI]: 60%, 68%), specificity of 53% (95% CI: 43%, 63%), positive predictive value of 87% (95% CI: 83%, 90%), negative predictive value of 23% (95% CI: 18%, 29%), and positive and negative likelihood ratios of 1.37 (95% CI: 1.10, 1.70) and 0.68 (95% CI: 0.59, 0.78), respectively. The combination of positive Thessaly and McMurray tests showed a sensitivity of 53% and specificity of 62%.

Conclusion The results of the Thessaly test alone or combined with the McMurray test do not seem useful to determine the presence or absence of meniscal tears.

Level of Evidence Diagnosis, level 2b.

KEYWORDS:

McMurray; knee; meniscus; sensitivity; specificity