



Physical examination tests give poor diagnostic indication of lumbar disc herniation

Clinical question

How effective are physical examination tests in identifying radiculopathy due to lower lumbar disc herniation in patients with low-back pain and sciatica?

Bottom line

When used in isolation, diagnostic performance of most physical tests (scoliosis, paresis or muscle weakness, muscle wasting, impaired reflexes, sensory deficits) was poor compared to the “gold standard” of findings at surgery or on CT or MRI. Some tests (forward flexion, hyper-extension test, and slump test) performed slightly better, but the number of studies was small. In patients with low-back pain and sciatica, a diagnosis of lumbar disc herniation should not be based on the results of one single physical examination test. Combining positive test results increased the specificity of physical tests, but few studies presented data on test combinations.

Caveat

The diagnostic performance of physical examination tests in primary care populations and other general, unselected patient groups is still unclear as evidence from these settings is scarce (only 1 study).

Context

Low-back pain is a common cause of disability in western industrialised countries. In patients who report sciatica, clinicians evaluate the possible causes of radiculopathy through history and physical examination.

Cochrane Systematic Review

van der Windt DAWM et al. Physical examination for lumbar radiculopathy due to disc herniation in patients with low-back pain. Cochrane Reviews 2010, Issue 2. Article No. CD007431. DOI: 10.1002/14651858.CD007431.pub2.

This review contains 19 studies involving 8224 participants.

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