

Physical examination tests of the shoulder: a systematic review with meta-analysis of individual tests

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Setting the scene:

History and physical examination of patients with shoulder pain has traditionally been a cornerstone of the diagnostic process. The ability to correctly diagnose the source of shoulder pain can save the patient from further diagnostic tests that are more costly, painful or inconvenient. Physical examination tests have historically been an integral part of this process. Many studies questioned both the accuracy and reliability of the clinical examination especially as it relates to a pathoanatomical model. The purpose of this review was to evaluate the diagnostic accuracy of individual orthopedic physical examination tests of the shoulder.

What did they do?

A search of MEDLINE, CINAHL, and SPORTDiscus databases through OVID was done. In addition to the database searches, personal files were hand searched for publications, posters or abstracts. The reference lists in review articles were cross-checked and all individual names of each special test were queried using Medline and PubMed. 45 studies were critiqued with only half demonstrating acceptable high quality and only two having adequate sample size. Internal and external validity(quality) were evaluated using the Quality Assessment of Diagnostic Accuracy Studies (QUADAS) tool. Meta-analysis was performed using dr-ROC software version 2.00. The results showed that the diagnostic accuracy of the Neer test and the Hawkins-Kennedy test for impingement and the Speed test for labral pathology is limited.

Takeaway message:

Regarding the individual tests of the shoulder, there are very few tests that appear to be diagnostically discriminatory and, therefore, useful in the clinic.