Correspondences

Comments on review by Beaudreuil et al. “Contribution of clinical tests to the diagnosis of rotator cuff disease: A systematic review”

Keywords: Clinical tests; Cuff disease

We have read with great interest the article by Beaudreuil et al. [1] on the accuracy of clinical tests for the diagnosis of rotator cuff disease. In their excellent systematic review, they emphasize the critical importance of knowing the performance of the manoeuvres used in daily clinical practice for a better identification of the nature of the lesions and for helping to guide treatment decisions in patients with painful shoulder.

We would like to highlight the main results of our recently published article [2] that studies the accuracy of physical examination in subacromial impingement syndrome (SIS). Since Beaudreuil et al. updated their systematic review to the first half of 2006; they did not have the opportunity to include our data in their analysis. Briefly, we included 30 patients with a new-onset episode of non-traumatic shoulder pain. In every case, a detailed physical examination and a MRI were done within three days. MRI was considered as the gold-standard. As Beaudreuil et al. concluded in their review, in our study, Neer and Hawkins manoeuvres also had a good sensitivity (68% and 73%, respectively) but a low specificity (30% and 40%, respectively) in the detection of SIS. We also included Yocum manoeuvre in the analysis, showing a sensitivity of 79% and a specificity of 40% for the detection of MRI-confirmed SIS. We wondered whether any combination of manoeuvres could improve the diagnostic value of the physical examination and we found that the combination of Neer and Hawkins manoeuvres reached a likelihood ratio (LR) of 1.58, slightly better than any of the manoeuvres separately (LR of 0.98, 1.23 and 1.32 for Neer, Hawkins and Yocum manoeuvres, respectively).

We strongly agree with Beaudreuil et al. that further investigations are needed for better understanding the accuracy and performance of clinical examination in the evaluation of the painful shoulder. To know the LR of the different manoeuvres used in the diagnosis of the painful shoulder is of crucial importance for the judicious choice of diagnostic and therapeutic options.

References


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Reply to the letter by Silva about the review entitled “Contribution of clinical tests to the diagnosis of rotator cuff disease: A systematic literature review”

Keywords: Clinical tests; Rotator cuff disease; Tendinopathy; Tear; Impingement

We thank Silva et al. for their comments and complementary information about our review on clinical tests of rotator cuff disease [1]. Their study is indeed interesting [2]. It was effectively not included in our review, this last being updated to the first half of 2006.

Many clinical tests have been described to explore rotator cuff disorders [1]. Further investigations remain effectively necessary for better understanding their diagnostic value and for suitable interpretation. In this way, two types of clinical tests have to be clearly distinguished: tests of rotator cuff aiming at diagnosis of tendinopathy or tear; tests of impingement aiming at detecting a specific pathogenic process. Thus, reference criteria should not be the same and should logically depend on type of clinical test. It is a reason why reference criteria that have previously been used for studying clinical tests for subacromial impingement – Neer, Hawkins and Yocum tests – are open to criticism. Tendinopathy or tears are not, in our point of view, specific markers for subacromial impingement. Indeed, subacromial impingement is not a unique causative factor of rotator cuff disorders. Reference criteria that are more specific should be considered. Painful impingement detected by ultrasound and clinical response to dynamic humeral centering, that is a modality of physiotherapy directed against subacromial impingement, are suitable for further investigations. For clinical tests evaluating the rotator cuff tendons,