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*Musculoskeletal*

# Exercise strategies in subacromial pain syndrome

## Is there an added value of specific exercises?

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Despite the large amount of research on exercise strategies for treating patients with subacromial pain syndrome (SPS), the evidence for using specific exercises rather than general exercises in rehabilitation is insufficient.

This the conclusion of a recent systematic review, which included 6 randomised controlled trials (RCTs) totalling 231 participants with SPS. Both qualitative and quantitative analyses were performed to synthesise the available data.

Right now, a large part of the physical examination in patients with SPS is focused on identifying possible abnormal posture and kinematics of the shoulder complex and thoracic spine. Rehabilitation then aims to correct these deficits – and thus reduce pain and improve function – using coordinative, resistance and stretching exercises. But what is the optimal configuration? And which specific exercises are most effective?

In the current study, an extensive literature search was conducted, followed by a thorough selection procedure, all according to recommendations made by the Cochrane Collaboration. Six RCTs were included in the analysis, adding up to a total of 231 subjects. All studies had outcome measures in the domains pain, function, quality of life (QoL), strength and range of motion (ROM).

Synthesis of best evidence learned that there is either insufficient or conflicting evidence for the use of specific exercise strategies for improving pain, function, general strength and proprioception. There is, however, limited evidence for specifically training the scapular stabilisers. No evidence was found that specific exercises could increase ROM.

A quantitative analysis was also performed. For neither pain nor function, a significant effect of specific exercises was found. Due to heterogeneity of the studies, pooling of data was not possible for outcome measures regarding strength, proprioception and ROM.

The authors state that inconsistencies and lack of methodological quality are limiting the conclusions that can be drawn based on the available evidence. Therefore, no recommendations are included either about exercise parameters (e.g., type, frequency, volume and intensity).

# Expert opinion

Although the authors seem to attribute the absence of evidence in favour of specific exercise strategies to the heterogeneity and methodological quality of the included RCTs, the conclusions of this systematic review and meta-analysis in line with research into specific exercises.

In populations with low back and neck pain, the added value (or superiority) of motor control exercises to improve neuromuscular control and coordinator of deep stabilizing muscles of the spine could not be demonstrated.

This gives rise to a lot of questions. Does it matter which exercises we prescribe, or is it okay as long as we stimulate the patient to move actively? Will more simplified programs do the trick as well? How much exercise specificity can we sacrifice for the sake of compliance?