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## Contributions of myofascial pain in diagnosis and treatment of shoulder pain. A randomized control trial.

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### Abstract

**BACKGROUND:** Rotator cuff tendinopathy and subacromial impingement syndrome present complex patomechanical situations, frequent difficulties in clinical diagnosis and lack of effectiveness in treatment. Based on clinical experience, we have therefore considered the existence of another pathological entity as the possible origin of pain and dysfunction. The hypothesis of this study is to relate subacromial impingement syndrome (SIS) with myofascial pain syndrome (MPS), since myofascial trigger points (MTrPs) cause pain, functional limitation, lack of coordination and alterations in quality of movement, even prior to a tendinopathy. MTrPs can coexist with any degenerative subacromial condition. If they are not taken into consideration, they could perpetuate and aggravate the problem, hindering diagnosis and making the applied treatments ineffective. The aims and methods of this study are related with providing evidence of the relationship that may exist between this condition and MPS in the diagnosis and treatment of rotator cuff tendonitis and/or SIS.

**METHOD/DESIGN:** A descriptive transversal study will be made to find the correlation between the diagnosis of SIS and rotator cuff tendonitis, positive provocation test responses, the existence of active MTrPs and the results obtained with ultrasonography (US) and Magnetic Resonance Imaging (MRI). A randomized double blinded clinical trial will be carried out in experimental conditions: A Protocolized treatment based on active and passive joint repositioning, stabilization exercises, stretching of the periarticular shoulder muscles and postural reeducation. B. The previously described protocolized treatment, with the addition of dry needling applied to active MTrPs with the purpose of isolating the efficacy of dry needling in treatment. **DISCUSSION:** This study aims to provide a new vision of shoulder pain, from the perspective of MPS. This syndrome can, by itself, account for shoulder pain and dysfunction, although it can coexist with real conditions involving the tendons. **TRIAL REGISTRATION:** ISRCTN Number: 30907460.

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## Related citations

- [Treatment of myofascial trigger points in common shoulder disorders by physical therapy: a randomized controlled trial \[ISRCTN75722066\]](#). [BMC Musculoskelet Disord. 2007]

Treatment of myofascial trigger points in common shoulder disorders by physical therapy: a randomized controlled trial [ISRCTN75722066]. *Bron C, Wensing M, Franssen JL, Oostendorp RA. BMC Musculoskelet Disord. 2007 Nov 5; 8:107. Epub 2007 Nov 5.*

- [The prevalence of neovascularity in patients clinically diagnosed with rotator cuff tendinopathy](#). [BMC Musculoskelet Disord. 2009]

The prevalence of neovascularity in patients clinically diagnosed with rotator cuff tendinopathy. *Lewis JS, Raza SA, Pilcher J, Heron C, Poloniecki JD. BMC Musculoskelet Disord. 2009 Dec 21; 10:163. Epub 2009 Dec 21.*

- [Rotator cuff tendinopathy/subacromial impingement syndrome: is it time for a new method of assessment?](#) [Br J Sports Med. 2009]

Rotator cuff tendinopathy/subacromial impingement syndrome: is it time for a new method of assessment? *Lewis JS. Br J Sports Med. 2009 Apr; 43(4):259-64. Epub 2008 Oct 6.*

- [Review Contribution of clinical tests to the diagnosis of rotator cuff disease: a systematic literature review](#). [Joint Bone Spine. 2009]

Review Contribution of clinical tests to the diagnosis of rotator cuff disease: a systematic literature review. *Beaudreuil J, Nizard R, Thomas T, Peyre M, Liotard JP, Boileau P, Marc T, Dromard C, Steyer E, Bardin T, et al. Joint Bone Spine. 2009 Jan; 76(1):15-9. Epub 2008 Dec 6.*

- [Review Treatment of myofascial pain syndrome](#). [Curr Pain Headache Rep. 2006]

Review Treatment of myofascial pain syndrome. *Hong CZ. Curr Pain Headache Rep. 2006 Oct; 10(5):345-9.*