Management of shoulder injuries using dry needling in elite volleyball players.

Osborne NJ, Gatt IT.

School of Medicine, University of Sheffield, UK.

**Abstract**

These case reports describe the short-term benefits of dry needling in shoulder injuries in four international female volleyball athletes during a month-long intense competitive phase, using both replicable subjective and objective measures. Dry needling of scapulohumeral muscles was carried out. Range of movement, strength and pain were assessed before and after treatment, with a functional assessment of pain immediately after playing and overhead activity, using the short form McGill Pain Questionnaire. All scores were improved post-treatment and athletes were able to continue overhead activities. Previous studies have suggested that myofascial trigger points may cause significant functional weakness and reduced range of motion, with referred pain. Trigger point dry needling has been successful in treating athletes with myofascial pain and impingement symptoms but with only subjective improvement and not during a competitive phase. These cases support the use of dry needling in elite athletes during a competitive phase with short-term pain relief and improved function in shoulder injuries. It may help maintain rotator cuff balance and strength, reducing further pain and injury.

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• **Risk factors for volleyball-related shoulder pain and dysfunction.** [PM R. 2010]
  

• **Dry needling of trigger points with and without paraspinal needling in myofascial pain syndromes in elderly patients.** [J Altern Complement Med. 2007]
  

• **Short-term effects of dry needling of active myofascial trigger points in the masseter muscle in patients with temporomandibular disorders.** [J Orofac Pain. 2010]
  

• **Review Rotator cuff pathology in athletes.** [Sports Med. 1997]
  

• **Review Acupuncture and dry needling in the management of myofascial trigger point pain: a systematic review and meta-analysis of randomised controlled trials.** [Eur J Pain. 2009]
  

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