

Focused ESWT as a Useful Diagnostic Tool for Myofascial Trigger Points

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Device and producing company:

Piezoson 100Plus, Richard Wolf

Introduction:

Myofascial trigger points (MTrPs) are often found during a targeted examination of the shoulder. The question of how frequent and how important MTrPs are in the case of sports-related shoulder pain however, has not yet been clarified.

Methods:

Sixty athletes suffering from shoulder pain were examined. In addition to sportsrelated anamnesis and clinical examination of the shoulder, palpation diagnosis for MTrP according to the diagnostic criteria established by Travell/Simons was carried out in the area of the entire shoulder musculature. On the basis of the rating of the pressure pain threshold, referred pain and recognition of the shoulder pain caused by the palpation, the importance of the diagnosed MTrP was evaluated. In addition to palpation, an examination of MTrP was performed with focused extracorporeal shock waves (fESWT) at a low energy level (max. 0.28 mJ/mm²) using a Richard Wolf Piezoson100Plus.

Results:

MTrP-Palpation:

In the infraspinatus and biceps muscles of more than 80% of the shoulder pain patients, MTrP could be found by palpation. Also in most of the other shoulder muscles, numerous MTrPs could be found by palpation.

Palpation vs. fESWT:

Diagnostic criteria of recognition and referred pain in the infraspinatus and biceps muscle. Exemplary findings: Recognition and referred pain could be elicited by fESWT in a significantly higher number of athletes with shoulder pain than by manual palpation.

Discussion:

Myofascial trigger points (MTrPs) can often be diagnosed when patients complain about sports-related shoulder pain, and they contribute considerably to the symptoms. Including the examination for MTrP will therefore broaden the understanding for the cause of shoulder pain.

Conclusion:

Compared to palpation, the examination of MTrPs with fESWT elicited recognition and referred pain more often. For this reason fESWT can be considered a powerful diagnostic instrument for myofascial pain syndrome.