Myofascial trigger point acupuncture treatment in athletes with chronic nonspecific low back pain

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Background and Goal of Study: Athletic activities are associated with repetitive injuries and overload training, which in turn are associated with myofascial trigger points (MTrPs) formation

Materials and Methods: Randomized double blinded placebo controlled study, approved by the Institutional Review Board, involved 48 amateur athletes with chronic nonspecific low back pain (CNLBP) with MTrPs activity, who attended the clinic in Sept.2016–Aug.2017 and were divided into two groups (24 patients each) by the sealed envelope method. The study group completed a classic acupuncture treatment course (15 sessions every other day), the control—a sham-acupuncture course using the same characteristics but with needles placed not deep enough. The treatment effectiveness criteria included pain severity by visual analogue scale (VAS), the pain attack frequency and duration, evaluated prior to and 3 months after treatment. The data was analyzed with IBM SPSS Statistics and MS Excel software

Results and Discussion: The mean age was 30.2±9.1 and 27.5±8.4 in the study and control group, respectively. The majority of participants were men (22 and 20, respectively). At admission the VAS score was 7.3±1.9 and 6.7±1.6 points, pain attack frequency was 6.4±2.1 and 6.8±1.9 days per month with its duration 23.6±7.7 and 19.9±6.2 hours in the study and control groups, respectively

After the 3-months treatment pain severity (1.8 ± 0.4 and 4.9 ± 0.7 VAS points in the study and control groups respectively, $p < 0.05$), the pain attack frequency (2.2 ± 0.7 and 6.1 ± 1.2 attacks; $p < 0.05$) decreased as well as its duration (5.6 ± 1.6 and 16.3 ± 4.1 hours; $p < 0.05$)

Conclusion: Acupuncture treatment is beneficial to athletes with CNLBP

Amateur athletes

WOMEN

13%

MEN

87%

Posterior View of Back Muscles

VAS analysis comparison between study and control group after acupuncture treatment

PAIN EFFECT ANALYSIS

1

Pain attack frequency comparison between study and control group after acupuncture treatment

2.1

Pain duration frequency comparison between study and control group after acupuncture treatment

2.2

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References:

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