

The Efficacy of Frequency Specific Microcurrent Therapy on Delayed Onset Hamstring Muscle Soreness

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Abstract

Introduction The effects of frequency specific microcurrent (FSM) therapy versus sham therapy in delayed onset muscle soreness (DOMS) was studied to determine whether specific frequencies on two channels would produce better results than single channel single frequency microcurrent therapy which has been shown to be ineffective as compared to sham in DOMS. Frequency specific therapy is thought to operate by the effects of both microamperage current and resonance on tissues and biochemical bonds.

Methods 18 male and 17 female healthy participants (mean age 32 +/- 4.2 years) were recruited. Following a 15-minute treadmill warm-up and 5 sub-maximal eccentric muscle contractions, participants performed 5 sets of 15 maximal voluntary eccentric muscle contractions on a seated leg curl machine. Post-exercise, participants had one leg randomly assigned to a subsensory, silent treatment of 20 minutes of frequency specific microcurrent stimulation, while the other leg acted as non-treated control with the device turned off. (see [figure 1](#)) Participants were blinded to the treatment but the experimenter was not. Soreness was rated for each leg at baseline and at 24, 48 and 72 hours post exercise on a visual analogue scale (VAS), which ranged from 0 (no pain) to 10 (worst pain ever).

Link: <https://bjsm.bmj.com/content/45/2/e3.1>