
ORIGINAL RESEARCH

ACUTE EFFECTS OF DIFFERENT SELF-MASSAGE VOLUMES ON THE FMS™ OVERHEAD DEEP SQUAT PERFORMANCE

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ABSTRACT

Background: The Functional Movement Screen (FMS™) is a battery of tests designed to assess movement competency; the overhead deep squat test, specifically, has been shown to be an accurate predictor of overall FMS™ scores. Self-massage (SM) is a ubiquitous warm-up utilized to increase joint range of motion and, therefore, may be effective for improving performance of the overhead deep squat test.

Purpose: To examine how different doses (30, 60, 90, and 120 seconds) of SM of different areas of the body (plantar fascia, latissimus dorsi, and lateral thigh) affects the score obtained on an overhead deep squat test.

Methods: Twenty recreationally active females were recruited to be tested on four occasions: sessions one and two consisted of baseline testing, session three consisted of SM applied to the lateral thigh, and session four consisted of SM applied to the lateral torso and plantar fascia.

Results: In all SM conditions, at least 90 seconds was required for a change in deep squat score from baseline; therefore, it is concluded that SM the lateral torso, plantar fascia, and lateral thigh for 90 seconds or more are effective interventions for acutely improving overhead deep squat scores.

Conclusion: Self-massage appears to be an effective modality for inducing acute improvements in the performance of the FMS™ overhead deep squat in all conditions tested.

Level of evidence: 2b

Keywords: Flexibility, foam rolling, self-manual therapy, self-myofascial release, tennis ball

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