INPLASY PROTOCOL

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Conflicts of interest:
None declared.

Vibration training to relieve delayed muscle soreness: A meta-analysis

Yin, YK[1]; Wang, JL[2]; Sun JZ[3].

Review question / Objective: This paper systematically evaluates the effect of VT on DOMS mitigation by Meta-analysis to provide an updated evidence-based basis.
Condition being studied: Vibration training to relieve delayed muscle soreness.
Eligibility criteria: (i) age > 18 years, good physical condition, no contraindications to exercise; (ii) induction of DOMS by exercise; (iii) no lower limb muscle pain and musculoskeletal disorders, no neurological and cardiovascular diseases.

INTRODUCTION

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METHODS

Participant or population: i) age > 18 years, good physical condition, no contraindications to exercise; (ii) induction of DOMS by exercise; (iii) no lower limb muscle pain and musculoskeletal disorders, no neurological and cardiovascular diseases.

Intervention: Vibration training.

Comparator: Stretching, massage, or no intervention.

Study designs to be included: Randomized controlled trial (RCT).

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Information sources: China Knowledge Network (CNKI), VIP, PubMed, EBSCO, and Web Of Science.

Main outcome(s): Visual analogue scale (VAS), pressure pain threshold (PPT), serum creatine kinase (CK), lactate dehydrogenase (LDH) and knee mobility (ROM).

Quality assessment / Risk of bias analysis: Cochrane Handbook for Systematic Reviews of. Interventions.

Strategy of data synthesis: RveMan 5.4.

Subgroup analysis: Different test time.

Sensitivity analysis: RveMan 5.4.

Country(ies) involved: China.

Keywords: vibration training; delayed muscle soreness; subjective pain; pressure pain threshold; serum creatine kinase; Meta-analysis.

Contributions of each author:
Author 1 - YIN YIKUN - drafted the manuscript；data curation.
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Author 2 - WANG JIALIN - The author provided statistical expertise.
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Author 3 - SUN JUNZHI - The author contributed to the development of the selection criteria, and the risk of bias assessment strategy.