



The Use of Musculoskeletal Ultrasonography for Spinal Pains Among Athletes, Gaps in the Knowledge

Pardis Noormohammadpour¹ and Navid Moghadam^{1,*}

¹Sports Medicine Research Center, Neuroscience Institute, Tehran University of Medical Sciences, Tehran, Iran

*Corresponding author: Sports Medicine Research Center, Neuroscience Institute, Tehran University of Medical Sciences, No. 7, Al-e Ahmad Highway, Tehran, Iran. Email: Navid.mgd@gmail.com

Received 2019 July 07; Accepted 2019 August 02.

Keywords: Low Back Pain, Ultrasonography, Athletes

Researchers and clinicians use musculoskeletal ultrasonography for the evaluation of spine-related structures (transabdominal and paraspinal muscles) (1) and the rehabilitation of spinal pains (neck and low back pain) (2) in everyday practice. The use of musculoskeletal ultrasonography has been validated among groups with different physical profiles, including but not limited to obese patients (3), pregnant women (4), and patients with chronic neuropathy (5). It has been shown that musculoskeletal ultrasonography is a reliable tool for evaluation of spinal structures and progress of the rehabilitation of pains among these patient groups regardless of their physiologic profile and changes in the musculoskeletal system due to their condition.

There have been studies which have used musculoskeletal ultrasonography in athletes. It has been used in the evaluation of transabdominal and paraspinal muscles in adolescent (6) and young (7) soccer players with/without low back pain. Researchers have also tracked muscle changes with musculoskeletal ultrasonography among soccer players during a season with and without developing low back pain (8). However, these studies were not confined to soccer, there have been studies using musculoskeletal ultrasonography among cyclists (9) and recreational runners (10), cricket players (11). Gray et al. have shown that contrary to the non-athlete population, symmetry and non asymmetry, of transabdominal muscles is concurrent with low back pain in cricket bowlers (12).

These findings would emphasize on sport-specific considerations in using musculoskeletal ultrasonography for spinal pains such as the biomechanics of the sport, side dominance of the athlete and ultrasonography of the sport-specific functions. It should also be considered that to the best knowledge of ours, there is no study using mus-

culoskeletal ultrasonography for neck pain among athletes. These points can help to design future studies which will address the concerns of using musculoskeletal ultrasonography for athletes' spinal pains.

Footnotes

Conflict of Interests: It is not declared by the authors.

Funding/Support: It is not declared by the authors.

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