Original Paper

Comparison of musculoskeletal abnormalities in professional wushu athletes and wrestlers with non-athletes

Hamed Babagoltabar Samakoush (M.Sc)¹, Ali Asghar Norasteh (Ph.D)*² Ebrahim Mohammad Ali Nasab Firouzjah (Ph.D)³, Ali Asghar Abozarzadeh (M.Sc)⁴

¹Ph.D Candidate in Physical Education - Sport Injury and Corrective Exercise, School of Physical Education and Sport Sciences, University of Guilan, Rasht, Iran. ²Professor, Department of Corrective Exercise and Sport Injuries, University of Guilan, Rasht, Iran. ³Assistant Professor, Department of Sport Physiology and Corrective Exercise, Faculty of Sports Sciences, Urmia University, Urmia, Iran. ⁴M.Sc in Sport Managment, University of Amoli, Amol, Iran.

Abstract

Background and Objective: Athletes suffer from poor physical fitness in some sports fields, which can cause long-term pain in their hands. This study was carried out to compare the musculoskeletal abnormalities in professional wushu athletes and wrestlers with non-athletes.

Methods: This descriptive-analytical study was carried out on 30 wrestlers, 30 Wushu athletes and 30 non-athlete subjects in Mazandaran province, north of Iran. Kyphosis and lordosis angles evaluation was performed by using flexible ruler. Evaluation of forward head and forward shoulders perform from side view with digital cameras and angles analyzed by AutoCAD 2010 software.

Results: The forward head in wushu athletes and wrestlers was significantly more than non-athletes (P<0.05). Also, forward shoulder in wrestlers and wushu athletes was significantly higher than non-athletes (P<0.05). In addition, kyphosis angle in wushu athletes and wrestlers were significantly higher than non-athletes. Also, Lordosis in wrestlers was higher than non-athletes (P<0.05). Uneven shoulder in wushu athletes was more than non-athletes (P<0.05).

Conclusion: This study showed that head, shoulder and spine status can be influenced by type of sport.

Keywords: Athlete, Wrestling, Wushu, Musculoskeletal abnormalities, Lordosis, Kyphosis

* Corresponding Author: Norasteh AA (Ph.D), E-mail: asgharnorasteh@yahoo.com

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