

3rd International Conference on

SPORTS MEDICINE AND FITNESS

October 05-06, 2017 Barcelona, Spain

Pharmaceuticals shoulder disease patterns of the wheelchair athletes of table-tennis and archery: a pilot study

Hea-Eun Yang, Seo Jin Seok, Bo Ram Ahn, Won Min Lee and Won-Jae Lee
Veterans Health Service Medical Center, South Korea

Objective: To investigate the shoulder disease patterns for the table-tennis (TT) and archery (AR) wheelchair athletes via ultrasonographic evaluations.

Methods: A total of 35 wheelchair athletes were enrolled, made up of groups of TT (n=19) and AR (n=16) athletes. They were all paraplegic patients and were investigated for their wheelchair usage duration, careers as sports players, weekly training times, the Wheelchair User's Shoulder Pain Index (WUSPI) scores and ultrasonographic evaluation. Shoulders were divided into playing arm of TT, non-playing arm of TT, bow-arm of AR, and draw arm of AR athletes.

Results: For the non-playing arm of TT athletes, there was a high percentage of subscapularis (45.5%) and supraspinatus (40.9%) tendinopathy. The percentage of subacromial-subdeltoid bursitis showed a tendency to be present in the playing arm of TT athletes (20.0%) compared with their nonplaying arm (4.5%), even though this was not statistically significant. Biceps long head tendinopathy was the most common disease of the shoulder in the draw arm of AR athletes, and the difference was significant when compared to the non-playing arm of TT athletes ($p < 0.05$).

Conclusion: There was a high percentage of subscapularis and supraspinatus tendinopathy cases for the nonplaying arm of TT wheelchair athletes, and a high percentage of biceps long head tendinopathy for the draw arm for the AR wheelchair athletes. Consideration of the biomechanical properties of each sport may be needed to tailor specific training for wheelchair athletes.

yangmary429@gmail.com