

The Correlations Between Foot Posture and Ilinoid Agility Test in Handball Players

Kunavut Vannajak (Ph.D)^{1,*}, Pimonpan Taweekarn Vannajak (Ph.D)¹, Chaladol Boonsri (M.S)²

¹Physical Therapy Division, Faculty of allied Health Sciences, Burapha University, Chonburi, Thailand

²Institute of Physical Education, Bangkok Campus, Ministry of Tourism & Sport, Pathum thani, Thailand

*Corresponding author: Kvs_28@hotmail.com

Abstract

Introduction: Hand ball is a speed movement sport. Handball player needs agility for the better movement. Foot is a height load of reaction force of the rigid court, especially foot arch which lead to flat foot and finally foot injury. Flat Foot always affects to agility aspect, therefore decrease sport performance. Objective of this study was test correlation with foot posture and agility performance of handball players.

Methodology: Fifteen handball players male 9 female 6, body mass index $22.14 \pm 3.2 \text{ kg/m}^2$, high $168 \pm 8 \text{ cm}$. age 19 ± 1 years old, in Institute of Physical Education Bangkok Campus were enrolling in this study for basic physical examination, foot posture evaluate used Navicular drop test and Ilinoid agility test by physical therapist.

Results: Flat foot was found 100 percent in right preferential foot (15 player all right foot) and 80 percent in left foot in handball player. Reverse high correlation with agility performance was found. (Pearson Correlation -0.506). High score of navicular drop test result to lower score of agility performance in Ilinoid agility test in handball players.

Conclusions: Flat foot direct affected to decrease agility performance in hand ball player. Flat foot may be part of decreased sport performance, therefore also decrease hand ball movement skill. Coach and physical therapist should be concern to foot posture of hand ball player by specific foot training or sport equipment to support arch of foot.

Keywords: Handball Players, Foot Posture, Ilinoid agility test, Navicular drop test