

Foot Posture and Balance in Marathon Runners, Badminton Players and Footballers

Manasi Desai and Shruti Gandhi

Abstract

Aim: This study aimed to compare foot posture and balance in marathon runners, badminton players and footballers. **Materials and Method:** Thirty (N=30) marathon runners, Thirty (N=30) football players and Thirty (N=30) badminton players who fulfilled the inclusion criteria, were included in the study. To measure foot posture, foot posture index was used and Y balance test was used to evaluate balance in the participants. **Results and Conclusion:** There was no significant difference in foot postures of marathon runners, badminton players and footballers as measured by Foot Posture Index. Most of them had normal foot posture followed by pronated feet. There was no significant difference in balance of marathon runners, badminton players and footballers as measured Y balance test. Average Y balance score was found highest in footballers, followed by badminton players and marathon runners. There was a negative correlation between Foot Posture and Balance. Correlation between the two variables was statistically significant in marathon runners.

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Introduction

Sports help in the development of mental health and physical fitness of the body. Indulging in sports helps our body function smoothly and more efficiently. In professional sports players, one of the major areas of focus is injury prevention. Among the many risk factors for injury in sports person in which two factors which have been extensively studied are foot posture and balance. Foot posture has been a focus of research in sports and health science. Factors which may predispose the musculoskeletal injuries of the foot or lower extremity are misalignment of the foot and faulty biomechanics (Bolgla and Malone 2004). In clinical practice, foot posture is commonly assessed for injury prevention and intervention. There are different methods of identifying foot posture such as Foot Posture Index (FPI) and foot print method. FPI has demonstrated good reliability and construct validity (Cornwall et al., 2008; Keenan et al., 2007). Foot Posture Index evaluates the three body planes and provides information on the hindfoot, midfoot and forefoot. The FPI is a criterion based rating system for weight bearing foot alignment, quantifying the degree to which a weight bearing foot can be considered to be in a pronated, supinated or neutral position, providing an indication of