Somatotype, and body composition of competitive female tennis, table tennis, badminton, and squash players

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Abstract
Morphological characteristics of athletes could be an important factor in successful performance. Previous researches have analyzed the characteristics of effort in training and competition in racket sports such as tennis (Christimass et al, Sánchez Muñoz et al), squash (Chin et al), and badminton (Sánchez Muñoz). Sánchez Muñoz described the anthropometric characteristics, body composition and somatotype of elite male and female junior tennis players. The anthropometric data, body composition and somatotype of the first 12 elite junior tennis players on the ranking with the lower ranked players were compared, and was established an anthropometric profile chart for elite junior tennis players. They observed significant in height and humeral and femoral breadths between the first 12 and the lower ranked girls players (Sánchez Muñoz et al). Chin et al described data on the physiological characteristics of elite Asian squash players to evaluate the physiological profile and sports specific fitness of Hong Kong elite squash players (Chin et al). Cabello Manrique assessed the physiological and metabolic bases of physical effort during badminton competitions and their possible relation to performance parameters as effective indicators of the final result. Also they calculated the volume and intensity of the work rate in a badminton match, measure the cardiovascular effort in a top level match, describe the temporal structure of a badminton competition in relation to the time of action and recovery, extract quantifiable variables of performance in play, and calculate the relation between the different variables and the final result of the match (Cabello Manrique). The aim of this study was to describe the morphological characteristics of competitive female Tennis (T), Table Tennis (TT), Badminton (B), and Squash (S) players. This study has made to show a diagram of physiological indexes in female Iranian athletes and show the physical capacity necessary to practice these sports to be established

Key words: Somatotype, body composition, tennis, table tennis, badminton, and squash players