Abstract

Title: Vertical jump comparison of women’s volleyball players

Objectives: The aim of this work was to comparison of vertical jump, postural stability and body composition of women’s volleyball players before and after season 2012/2013. During the season there was a deliberate intervention to develop explosive power. By the comparing the input and output of results we conclude that the training developed or didn’t develop explosive power of the lower limbs, and that had an effect on body composition and stability.

Methods: The study included 10 women from 2. Volleyball League (n=10 , age = ± 20,6 years, height = ± 172,7 cm, BMI = ± 0,19 kg/cm²). For input and output testing, we used three different tests. First, we measured body composition, then postural stability (1) narrow standing with eyes open (the US-OO), (2) narrow standing with eyes closed (the US-ZO), (3) standing on the right lower limb "flamingo test "(the FLA-R), (4) stands on the left lower limb (the FLA-L). Finally, the players performed six types of vertical jump. Jump with the upper limbs (V1 - Countermovement jump free arms) jump without the help of the upper limbs (V2 - Countermovement jump), jump from squatting (V3 - Squat jump), when the whole movement only made up, without countermovement, block jump (V4 - Block), moving one step aside on the block and jump from the left side (V5 - Block-L) and move one step aside on the block and jump from the right side (V6 - Block-P).

Results: The results showed that deliberate interventions and training, it is possible to achieve an improvement in explosive strength of legs without changes in postural stability and body composition.

Keywords: volleyball, vertical jump, explosive power, stability