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To Investigate the Effect of Galloping and Prancing Drills on Vertical Jump Height and Change of Direction in Volleyball Players: A Pilot Study

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Abstract

Prancing is an exercise where athletes strike the ground with both feet almost simultaneously, then fire off the ground quickly and perform high knee alternatively. Whereas Galloping is essentially a series of repeated single-leg jumps using rolling or flat-foot contacts. Vertical jumping ability and change of direction are of great importance for good performance in volleyball. Coaches need exercises that consume only a little time and still help to improve their players' jumping ability and change of direction without a high risk of injury. This study aimed to find the effect of prancing and galloping drills on vertical jump height and change of direction and acceleration. Five volleyball players participated voluntarily in the research. Before the training pre-test of all 5 participants (VJHT and CODAT) were recorded. Prancing drills (in-place prance, alternating prance, and quick alternating prance) and galloping drills (galloping over the ankle and galloping over the knee) of 40 meters X 2 for each drill were added in their warm-up for all 5 participants for 2 weeks. After 2 weeks post-test measurements were taken. Then Independent t-test was used to compare the pretest-posttest between the groups (VJH P value is 0.106 and CODAT P value is 0.227). Paired sample t-test was performed to compare the baseline values of VJH and CODAT (VJH_Pre and VJH_Post P value is <.001) and (CODAT_Pre and CODAT_Post P value 0.010). The result shows that using prancing and galloping drills in warm-up improves vertical jump height and change of direction and acceleration in volleyball players.

Keywords: Vertical jump height, change of direction, and acceleration test.