

ABSTRACT

The aim of this thesis is to evaluate the effect of training load for the development of selected somatic characteristics measured by antropometry standard technique using DTP 3 system for young ice hockey players by comparing the differential values observed for the same age population of children without regular training load. The research group consists of 52 players HC Plzeň 1929 divided into six groups within each age group. Evaluated are basic somatometric characters, body height and weight and selected height, width and circuit characteristics. Furthermore, the lateral deviation of the spine, changes in depth and angle parameters spinal curves and changes of lateral, vertical and rotational parameters both of the acromion and posterior superior iliac spine. Data are statistically evaluated using the normalization index. Differences of mean values of the analyzed parameters in different age categories do not show up on exceptions in body weight and depth of cervical and lumbar lordosis, the impact of gaming burden on somatic development of young hockey players. Observed asymmetry and standard deviations of the rated entities, documented by diagnostic DTP 3 system, can be probably attributed to the detriment of excessive postural stress associated with game activities.

Keywords: spine, spinal shape diagnostics, system DTP 3, somatometry.