

Abstract

Title: Starts of sprint disciplines performed by spastic athlete and particularities of the training process

Aim of work: The aim of this work was analyzing of the specifics of athletic training determined for spastic sprinter class T38 and observation of the long term effect.

Methods: This work presents an empiric-theoretical study. Due to the uniqueness of the theme, method of case study has been chosen (intra-individual observation). This method was applied on the particular spastic sprinter by using longitudinal quantitative observation during her top sport career and applying one-off analysis focused on evaluation of different types of starts. This observation had qualitative and quantitative part. The quantitative part was based on the interpretation of 2D video comparing three types of start (low start, mid-low start and low start with a diagonal arm position) with the optimal start position described in the books. Comparison of average time for 10 metre distance was determined as quantitative element. . The observational group consists of the sprinter with Cerebral Palsy at Czech representative level.

Results: Our research resulted as follows: The mid-low start was assessed as the best one for the examined sprinter from the quality of start position point of view including the three criterions (extension of the body, an angle between thighs and an angle between thigh and trunk) On the other hand the low start was measured as the worst. The best start, however, considering the times reached for 10 metre distance, was the low start with diagonal arm position. We are also introducing the list of sprinter's functional defects related with training process and based on the results we are presenting practical set of compensation exercises determined for spastic athletes class T8. We assume that applying of knowledge and results obtained from our research will make the training methods more complete for spastics class T38 by implementing the specific ways.

Keywords: spasticity, mid-crouch start, crouch start, crouch start with diagonal position of arm, run-up position, functional defects, compensation exercise