

Abstract

Horse-riding has a major influence on the posture of the whole body of the rider. Rider has to constantly compensate the movement of horse's body and has to maintain a proper seat.

The compensation is very demanding in harder tasks (showjumping, trotting) and is provided mainly by the trunk area of rider's body. In addition, if the saddle doesn't fit the rider, it leads to improper seat and the compensation becomes even harder. In long term, that could affect different segments of the rider's body and his overall stability.

The practical part of this thesis consists of one-time examination of two groups. The first group contained nine showjumping and dressage riders who engage in horse-riding regularly over many years and do not do any other sport or compensatory exercises. The second group was control group and consisted ten healthy controls. Both groups contained 19–24 years old volunteers of the same gender. The main goal was to compare the two groups and to find out whereas the inclusion of the compensatory exercises would be desirable for riders. The examination was executed using a force plate with the software Kistler MARS (Measurement, Analysis & Reporting Software). On the force plate, postural stability of standing and a dynamic test were examined. Instrumental examination was complemented by selected tests from the DNS examination.

After statistic processing it was found that showjumping and dressage riding does not affect (in the observed parameters) stability of standing. We found proof of a difference in lateral loading of the lower limbs in the dynamic test in the concentric part of the move and also negative effect of showjumping and dressage riding on trunk stabilization in all of the examined DNS tests.