

## Abstract

- Title:** Analysis of the load of ice hockey referees in the extraliga and the II. liga
- Objectives:** The main goal of my diploma thesis is to analyze the load of referees in Tipsport Extraliga ledního hokeje and II. liga ledního hokeje.
- Methods:** For my research I chose the method of monitoring the heart rate of referees using POLAR cardiometers, as another method I used monitoring the intensity of the referee's load and last was the invasive method of measuring lactate using SCOUT Sirius lactate meter and then Lactate Scout Start Set SensLab. The investigation was carried out on a total of 12 judges II. liga (4 main referees and 8 line referees) and on 19 Tipsport Extraliga ledního hokeje referees (10 main referees and 9 line referees). In total, 31 referees aged  $30.1 \pm 6.2$  years. Heart rate was measured in all referees. The intensity of the load was measured for 19 referees, specifically 8 referees from II. liga ledního hokeje (4 main referees and 4 line referees) and 11 referees from the Tipsport Extraliga ledního hokeje (7 main and 4 line). Lactate was taken from 21 referees, of which 12 TELH referees (6 main referees and 6 line referees) and 9 referees of the II. Ice Hockey League (3 main referees and 6 line referees).
- Results:** The analysis of the results showed that the intensity of the load between the main and line referees is very important, as well as the intensive load of the referees between II. liga ledního hokeje and TELH. In II. liga, there are more burdens of main referees, while in TELH there are more burdens of line referees.
- Keywords:** referee, ice hockey, load intensity, heart rate, fitness conditions