Abstract

Title: Possibilities of using the Wim Hof method as a regenerative procedure and its comparison with the regenerative cooling procedure

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Objectives: The main goal of the thesis was to find out whether the Wim Hof method can be effectively used as a regenerative procedure between the training units, second goal was to judge on which components of after-load states the procedure has the biggest influence on. The other goals were to briefly summarize current knowledge about the basics of sports training, regeneration methods and methods of determining the effectiveness of regeneration procedures and to compare our results with knowledge in the professional literature.

Methods: As one of the methods, we used heart rate monitoring during the training cycle. The second monitored parameter was the values of feeling states, which were recorded using scales modeled on the Borg scales of perceived intensity and pain. The parameters of the resulting sensation score are sleep quality, mental state, fatigue and leg pain. 10 active sportsmen aged 21-26 took part in the research.

Results: The results of our research suggest that the Wim Hof method could be used as a regeneration procedure, especially in demanding parts of sports seasons with a large number of training units in a short period of time. The heart rate parameter did not show convincing results about the effectiveness of Wim Hof's method, but it confirmed the previously known fact that whole-body cooling has a significantly positive effect on regeneration. At the level of feeling states, we recorded promising values. The overall feeling state score showed the best values when using the Wim Hof method compared to the values from the microcycle without the use of the regeneration procedure and compared to the values of the microcycle with cooling. Wim Hof's method had the most significant effect on the parameters of fatigue and psychological state. Positive effects were also observable in the parameters of leg pain and sleep quality. In basic aspects, the results agree with the research already carried out, but we cannot give a clear answer to the question of whether it is possible to use Wim Hof's method effectively as a regeneration procedure. Either because of the methods used or because of the small number of probands and their homogeneity, more general conclusions cannot be drawn. Due to some of its characteristics, the Wim Hof method is not suitable for every individual.

Keywords: training, sport, regeneration, cooling, breathing exercise, meditation