

Posudek na diplomovou práci
Instrumental gait analysis in the ACL patient

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The theme of this work was to map the current state of the art and clinical practice in the field of instrumental gait analysis in patients with injury or after surgery of ACL.

This thesis has 77 pages, with 56 pages of text and 8 pages of attachments. There are 88 items in the list of referenced publications and other information sources. Structuring of the thesis in chapters and paragraphs is clear and logical. Also the choice of the key-words is appropriate. Plots and graphics are of sufficient quality and easy to understand. There are some minor misprints and grammar mistakes which, however, with regard to the complexity and extent of the whole work are of minor importance. As a whole, the thesis fully meets the requirements for a diploma thesis.

After a concise introduction, the author defines the scope of her thesis and outlines necessary theoretical backgrounds.

Separate chapter describes methodology of search and final selection and sorting of the reference works. It is highly systematic and precise and documents deep insight of the student into the analyzed topic.

The following section "Results" is processed with a critical approach to the selected publications and provides comprehensive comparison of different methods of gait analysis in use. This overview is complemented by the student's own views. Although the topic is discussed here from many perspectives, the text still keeps clarity without omitting of any important aspects. The author highlights both the expected as well as unexpected or surprising results of the studied works and their mutual interrelation and thus provides the reader with a truly complex picture of the described subject.

I have just a minor comment on the Conclusion paragraph, which is in my opinion kept unnecessarily short. A more comprehensive summary of the results and a broader discussion of the presented findings would certainly further increase level and value of the whole work. In this context, I would like to ask the following question:

Can some variables and their ranges listed in Chapter 4.3 be considered as interindividually valid or do they represent strictly individual characteristics? Please specify those variables more precisely from this point of view.

The author has shown appropriate ability of orientation in a given problem and demonstrated extremely systematic approach in looking for adequate solution. The thesis represents a good starting point for further study of this problem, which, in case of the author, would be accompanied by her own scientific and research activities within a PhD project.

I suggest classification of the work as **excellent**.

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