Opponent's review of the master's thesis

Title Effectiveness of conservative and

Microdissectomy treatment for patients with

lumbar disc herniation

Author Denis Homotetski

Type of the thesis: Literature Review

Volume: 70 text pages, 15 figures, 8 tables. 99 literature quotations.

As a physiotherapist the author applies all benefits of the conservative treatment of lumbar disc hernia, but he is aware of restriction of the conservative treatment and respects the right time to surgical treatment by microdissection which helps some times promptly. In 30 pages the author gives a recent review concerning the structure and the function of the lumbar spine and problem of the lumbar disc hernia. In 20 pages he describes all conservative and modern surgical treatment options. Extensive discussion on 17 pages finishes the thesis.

On page 23 the author underestimates the influence of external environmental factors participating on the incidence of disc hernia and accents the influence of genes. But molecular biologists say that environmental factors are able to lock or to release the gene function dependent on the individual personality. What is your meaning as a physiotherapist?

The aim of the thesis was to find out what kind of conservative treatment is optimal and what kind of surgical intervention is optimal and at the end to compare the results of conservative and surgical treatment after 2 years.

After long and critical discussion the author states: if after 6 weeks of conservative treatment the symptoms are steadily present, the best solution is the surgical treatment with micro-dissectomy technique. There in not much difference between the conservative exercise and the ADL treatment. The best conservative effect is the educational treatment.

At the end of the thesis the author closes: the number of lumbar hernias is increasing. And even this statement confirms the experience that the environmental influences and the epigenetic factors of civilized life have more influence than the genes themselves on the incidence of disc hernia.

The submitted thesis brings a vast overview of the incidence, the diagnostic and treatment of discus hernia problem and brings new experiences important for physiotherapists. I evaluate this thesis as very good and I recommend it to be defended before the examining board

Prague The 15th January 2014

As, Prof. MUDr. F. Véle Csc.
Dept. of Physiotherapy
Faculty of Physical Education and Sport
Charles University Prague