

## OPINION

By Assoc. Prof. Dr. Evgenia Petrova Dimova, MD  
Department of Physiotherapy, Rehabilitation, Thalassotherapy and  
Occupational diseases  
Faculty of Public Health  
Medical University "Prof. Dr. Paraskev Stoyanov" – Varna  
regarding

dissertation work for the acquisition of the educational and scientific degree  
"Doctor" in area 7. Health care and sports, professional direction 7.1. Medicine,  
in the scientific specialty "Physiotherapy, resort science and rehabilitation",  
prepared by

**Dr. Liliya Peycheva Panayotova-Ovcharova,**  
PhD student at the Department of Physiotherapy, Rehabilitation,  
Thalassotherapy and Occupational Diseases  
Faculty of Public Health  
Medical University "Prof. Dr. Paraskev Stoyanov" – Varna

Dissertation topic:

**“A comparative study of the effects of a conventional physiotherapy  
complex and a high-energy laser in patients with peritendinitis of the  
glenohumeral joint”**

**Basis for drawing up the opinion:** By order of the Rector of MU-Varna N P-109-246/13.06.22. I am determined to participate with an opinion on the defense of Dr. Panayotova.

**1. Significance of the problem and formulation of the goal and tasks:**

The study explores glenohumeral peritendinitis as a therapeutic challenge for physical medicine, especially in the acute phase, when most physical factors can be applied in low doses, administered in combination or as monotherapy. The disease is almost always associated with temporary or permanent disability. Rotator cuff tendinopathy has a high prevalence and significant socioeconomic burden due to lost of work and high medical costs. The increasing incidence of this disease and its accompanying complications have serious implications for patients and society.

The aim of the dissertation is clearly formulated and concerns the comparison of the effectiveness of two methods of treatment of peritendinitis of the glenohumeral joint - with MLS laser therapy and combined therapy with microwave diathermy and interference current.

There are 5 tasks, formulated clearly and correctly and they correspond to the purpose of the study.

There is relevance of the problem developed in the dissertation in scientific and scientific-applied terms.

## **2. Structure of the dissertation:**

The dissertation has a classic structure, contains 151 standard pages and is illustrated with 24 tables, 15 appendices and 33 figures.

## **3. Literary awareness of the doctoral student:**

The literature review of the dissertation is presented on 37 pages, extensive, thorough, showing knowledge of the issues discussed in the dissertation. The bibliography consists of 272 sources, of which 26 in Cyrillic and 246 in Latin, most of them published in the last 5 years.

## **4. Methodology and design of the scientific research:**

The study is prospective, randomized, parallel. 76 patients with acute peritendinitis of the glenohumeral joint with clinical manifestations, aged from 20 to 55 years and duration of symptoms no more than 7 days, without applied treatment were examined for its purposes.

The results were processed with SPSS - version 23.

The doctoral student has chosen appropriate modern methods, enabling the achievement of the set goal and obtaining an adequate answer to the tasks set in the dissertation work.

## **5. Consistency between the objective, results and conclusions:**

The own results and the discussion are presented on 32 pages, presented with well-illustrated 24 tables and 33 figures, which, together with the statistical analyses, follow the progress of the tasks. The analysis of the results shows the knowledge of the doctoral student in evaluating the information and analyzing the obtained data. The dissertation ends with 5 conclusions, formulated clearly and concretely, reflecting the analysis of the results and meeting the set goal.

The specified contributions of the dissertation work are objective and derive from the obtained results. For the first time in Bulgaria, a comparative study of the effects of a combined physiotherapy complex with a high-energy laser in patients with peritendinitis of the glenohumeral joint was conducted. The effects of MLS laser treatment have been proven to be superior to treatment with a combined complex of microwave diathermy and interference current in the studied patients in most follow-up indicators.

## **6. Abstract:**

The abstract is written on 54 pages, sufficient in volume to synthesize what is presented in the dissertation, as well as the achieved results.

## **7. Critical notes and recommendations:**

I have no critical remarks. Recommendations – to maintain a good publication activity, to publish all results related to the dissertation work.

## **8. Publications and participation in scientific events on the dissertation work:**

In connection with the dissertation, 3 non-refered full-text publications and 1 participation in a national conference are presented, which covers the necessary quantitative criteria.



### **9. Personal impressions of the candidate:**

Dr. Panayotova is a specialist in Physical and Rehabilitation Medicine, showing ambition and interest, both in daily work and in the tasks and innovations in the field of physiotherapy and rehabilitation. Correct and extremely attentive to patients, collegial to the team of the Physiotherapy and Rehabilitation Clinic, the members of the Department, as well as to colleagues from other specialties. Her desire to constantly develop and improve is a prerequisite for growth as a scientist and specialist.

### **10. Conclusion:**

The presented dissertation work of Dr. Lilia Panayotova-Ovcharova on the topic "Comparative study of the effects of a conventional physiotherapy complex and a high-energy laser in patients with peritendinitis of the glenohumeral joint" is a complex study with a clearly formulated goal, tasks, correct and well-founded conclusions and original theoretical-methodological and practical-applied contributions. Demonstrates the doctoral student's abilities to collect and analyze scientific information.

The presented materials comply with the requirements of the Law for the Development of the Academic Staff of the Republic of Bulgaria and the Regulations and the order for acquiring scientific degrees and holding academic positions in the MU – Varna.

**Based on the above, I recommend to the members of the highly respected scientific jury to award the educational and scientific degree "Doctor" to Dr. Lilia Peycheva Panayotova-Ovcharova for the dissertation "Comparative study of the effects of a conventional physiotherapy complex and a high-energy laser in patients with peritendinitis of glenohumeral joint'.**

15.07.22  
Varna

Assoc. prof. Dr. Evgenia Vladeva, MD, Ph.D.

