STATEMENT



From Assoc.Prof. D-r Nedko Dimitrov MD,
Head of Clinic of
"Orthopaedics and Traumatology"
UMHAT "St. Kirkovich" St. Zagora

<u>Subject:</u> dissertation of Dr. Petko Ivanov Ganev, Department of Orthopedics and Traumatology, Plovdiv University on the topic: "Therapeutic possibilities of cryoablation in low lumbar pain" for the award of educational and scientific degree "DOCTOR".

The dissertation is dedicated to a topical, both for modern Orthopedics and Traumatology and a number of other specialties topic, such as the treatment of low back pain. The work has a volume of 138 pages, of which 18 pages (185 titles) bibliographic reference. It is structured as standard with introduction, historical data, anatomy and biomechanics of the lumbar spine, etiology of LBP, research methods, treatment methods, purpose, tasks, material and methods, conclusion, conclusions, discussion and bibliography. The literature review contains 5 standard pages, which is a sufficient part of the dissertation, which is the requirement for the preparation of this type of work. The work is illustrated with numerous tables and figures, as well as with qualitative intraoperative imaging studies including standard facial radiographs. The set goal is clearly defined and for its realization are appropriately formulated tasks.

The contingent includes 218 patients with low lumbar pain, followed at the Clinic of Orthopedics and Traumatology at the University Hospital "St. George" - Plovdiv for a period of 4 years. For the set purposes the author has divided the patients into different groups. Very correctly Dr. Ganev subdivides a group of patients with symptoms of root compression and without. The series of patient groups are sufficiently voluminous and representative and allow reliable statistical analysis.

The results of the treatment were evaluated with the Visual Analog Scale in terms of pain response, and the Oswestry Disability Index and SF-36 were used for quality of life. Statistical processing was performed using variation and correlation methods.

The results of the study have been thoroughly analyzed and discussed. A comparison was made with the results reported by other medical teams around the world. The degree of influence of the procedure on the various etiological factors of LBP was reported. Optimal methods of probe placement, duration, freezing cycles are determined. The method of cryoablation of the facet joints with balloon kyphoplasty in osteoporotic fractures has been successfully combined.

The conclusions made are accurate and specific, logically follow from the results obtained and correspond to the set tasks. There are 5 scientific papers related to the dissertation, of which 1 article is in Latin in the journal Clinical Case Reports.

The presented dissertation examines a current medical and social problem, selects modern methods, and so far no such study has been conducted in our country. The work is prepared on the basis of high criteria for research methodology, structure, form and content, and has a contribution of scientific and practical nature. Based on the above, I believe that the work meets the requirements of the Regulations on the terms and conditions for obtaining scientific degrees and holding academic positions at the Medical University - Plovdiv for obtaining an educational and scientific degree "DOCTOR" and I propose that it be awarded to Dr. Petko Ganev.

Assoc.Prof. D-r Nedko Dimitrov MD