**OPINION**

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With order 15-01-213-1/05.04.2022 of the Executive Director and the Procurator of the hospital, I was confirmed as a member of the scientific jury and offered to present opinion on the procedure for public defense of the dissertation of Dr. Evgeni Vlaev on the topic, "Surgical treatment of scoliosis in childhood - methods of evaluation and analysis of achieved results" for the award of the educational and scientific degree "Doctor" in the field of higher education 7. Health and sports professional field 7.1 Medicine, doctoral program, General Surgery.

**Subject:** defense of the dissertation of Dr. Evgeni Vlaev, on the topic "Surgical treatment of scoliosis in childhood - methods for evaluation and analysis of achieved results" for awarding the educational and scientific degree "Doctor".

**Relevance of the topic**: A clinical study with a practical focus is presented. There is limited objectivity determined by the small number involved in the study of patients (101). The level of science in our country is such that it does not suggest opportunities for further development, for this even the very experience of implementing such research is relevant enough and deserves admiration for maintaining the level of scientific knowledge.

The operative techniques used for the first time in our country are presented and the indications and contraindications for their selection are determined. The target of the methodology are exclusively children, which determines the serious social significance of the work. There is still no universal solution, adequate to the huge pathoanatomical variety of spinal deformities and methodology for predicting postoperative results. In this sense, the work of Dr. Vlaev is a valuable and significant study in the search for so-called "Philosopher's Stone" - building a center for spinal deformities and deformities in Bulgaria in full and WHEN?

**The structure** of the dissertation is with volume of 130 standard typewritten pages, illustrated with 89 figures and 14 tables. The bibliographic reference includes 135 literary sources, of which 11 by Bulgarian and 124 by foreign authors.

**The goal** is formulated - "To explore the possibilities (used methods) for qualitative assessment of the outcome of surgical treatment of children with scoliosis and to implement it as a modern approach in the development of protocols for clinical evaluation of surgical treatment."

There are **seven tasks** correctly defined and relevant for achieving the goal.

**Methodology and clinical material.** The current retrospective study included 101 children with scoliotic spinal deformities operated in the Clinic of Orthopedics of Tokuda Hospital for the period from July 2014 to December 2019.

**Functional evaluation** of the obtained results was made using the SRS22r questionnaire.

**The discussion** concludes with three main findings of the study:

1. The objective clinical and radiological results of the operative treatment are quantitatively measured and comparable with leading clinics.

2. The SRS22r questionnaire is accessible, easily applicable as a tool and a practical way to measure subjective self-assessment of health.

3. In general, there is a lasting positive correlation when comparing the results of surgical treatment with the two methods.

As shortcomings in the present study, the author found some specific differences in the simultaneous assessment with the two methods, which requires special attention in the interpretation of the data, a small number of patients indicated for inclusion and a relatively short follow-up period.

**More important contributions**:

1. Data from a large-scale and long-term study of children with scoliosis before and after their surgical treatment are presented.

2. For the first time in our country a study of a qualitative indicator of the outcome of surgical treatment of scoliosis is being done. A tool developed by the Soliosis Research Sociaty (SRS) is used: questionnaire SRS22r.

3. A comparative analysis of the introduced method for qualitative assessment of the achieved results is made.

The value of written by Dr. Vlaev's work is determined not by the efforts made for its realization, but by the path he has taken to knowledge, as well as by the opportunity to share it with us. With the greatest respect to Dr. Vlaev and his teachers, I consider his work as a wonderful opportunity and having the strength to become a necessary tool for training future medical students, trainees and specialists in orthopedics and traumatology.

**In conclusion**, I believe that the work of Dr. Vlaev is dedicated to a current topic, is properly structured in a classic version and has serious scientific and practical value. I give a positive assessment because it has all the necessary qualities and meets the requirements for obtaining a scientific and educational degree "Doctor" in "Orthopedics and Traumatology".

03.05.2022 Sincerely yours, Assoc. Prof. Martin Burnev

Varna