

REVIEW

by Prof. Dr. HRISTO BOGDANOV ZHELYAZKOV MD, member of the scientific jury.

on the dissertation work on the topic "**ASSESSMENT OF EARLY AND LATE RESULTS AFTER CHEILOPLASTY**" 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 in plastic, reconstructive and aesthetic surgery, code 03.01.43, on the basis of Art. 2, paragraph 2 of the Law on the development of the Academic Staff in the Republic of Bulgaria (LAADRБ) and of Art. 30, paragraph 2 of the Regulations for the implementation of LAADRБ of MU -Plovdiv and by decision of the Faculty Council No. 10/ 04.12.2024 of the MF, MU -Plovdiv.

- **AUTHOR OF THE DISSERTATION - Dr. IVAN GENCHEV GINEV** - full-time doctoral student in the Department of "Propaedeutics of Surgical Diseases", MF, MU -Plovdiv -Section of Plastic, Reconstructive and Aesthetic Surgery.

- **SCIENTIFIC SUPERVISOR – PROFESSOR DR. YURIY ANASTASOV, DMN**

AT THE FIRST MEETING OF THE SCIENTIFIC JURY I WAS APPOINTED AS A REVIEWER.

BRIEF BIOGRAPHICAL DATA ABOUT THE DOCTORAL STUDENT:

Dr. Ivan Ginev graduated with honors from his medical school in 2021. From December 15, 2021, is a full-time doctoral student at the "Department of Propaedeutics of Surgical Diseases", Section "Plastic-Reconstructive and Aesthetic Surgery". Since 2022, he has been a specialist in the department of "Plastic-Reconstructive and Aesthetic Surgery for Children".

He is fluent in English and French - spoken and written.

He actively participates in presentations regarding the treatment of congenital facial anomalies at European and world forums.

RELEVANCE OF THE PROBLEM

One of the most common congenital anomalies in the craniofacial area is cleft lip and palate - for Europe the average frequency is 1.36 per 1000 births. Surgery of these anomalies is difficult, a multidisciplinary approach is required, and it is recommended that the treatment be concentrated in specialized centers, but also to provide qualified orthodontic and speech therapy near the patient's home.

The Center for the Treatment of Facial Anomalies in Plovdiv was created on the basis of The Department of Plastic, Reconstructive and Aesthetic Surgery for Children has been applying the same treatment protocol for more than 25 years. Over 90% of the cases in the country are treated here, with 60 to 80 new cases per year. A non-governmental organization ALA for parents of children with facial anomalies has also been established, which coordinates the work of multidisciplinary teams. Since 2010, a database registry for facial anomalies has been created, which has become an Electronic File, and through co-financing from the Canadian organization Transforming Faces, efforts are aimed at creating global assessments for each aspect of treatment at certain ages – 5-7 years, 8-10, 11-14, 15-18. The team uses a preoperative severity scale dividing cases into 4 groups by severity and 5 groups of postoperative results according to their level of restored anatomy and postoperative defects.

The ability to assess using this scale and the ability to make a global assessment during follow-up are a challenge for the team to analyze long-term results and their dynamics, by defining and establishing the frequency of postoperative defects, to classify them, to indicate ways for their correction and to establish whether the preoperative severity of the anomaly is related to the number of corrective interventions.

Structure of the dissertation: Dr. Ginev's dissertation work is presented on 144 pages. It is properly formatted according to the requirements and is written with the necessary academic style of the means of expression. Contains: Introduction and literature review - 36 pages; Aim and objectives - 1 page; Materials and methods - 15 pages; Own study with results and discussion 62 pages, summary - 4 pages; contributions - 2 pages; Bibliography - 14 pages.

The dissertation is illustrated with 38 tables and 80 figures and five pages with applications .

LITERATURE REVIEW: The literature review is sufficiently extensive and up-to-date and contains data on the epidemiology of facial clefts, normal and pathological embryology and anatomy of cleft lip; factors of etiopathogenesis; overview of surgical treatment methods; surgical protocol of the center in Plovdiv; The multidisciplinary approach to the treatment of congenital cleft lip and palate is described with an assessment of the results of the lip, preoperative assessment of severity and postoperative assessment of the result. Psychosocial aspect of clefts - quality of life and assessment of therapy from the patient's point of view, as in the study these assessments are a prerequisite for developing our own methodologies

AIM AND OBJECTIVES: The aim of the study is to analyze late results after lip surgery and nose surgery in patients with cleft lip only or lip and palate, according to the protocol used at the Center for the Treatment of Facial Anomalies in Plovdiv over the last 25 years, which does not include primary nasal dissection in primary cheiloplasty.

Objectives: 1. To compare the number of surgical interventions on the lip and nose against the preoperative severity of the cleft. 2. To analyze postoperative defects of the lip and nose by completing the currently missing categories. 3. To establish a relationship between preoperative severity and postoperative outcome in different age groups. 4. To improve the follow-up and documentation of patients with Cleft Lip and Cleft Palate using the EMRFA by creating new sections.

MATERIAL AND METHODS:

The study material includes 166 patients with all forms of cleft lip and palate, hospitalized in the Department of Plastic, Reconstructive and Aesthetic Surgery for Children at the University Hospital "St. George" - Plovdiv for the period from 1997 to 2024. Clear and adequate inclusion criteria were used.

All methods used are based on the possibility of tracking patients in the electronic register EMRFA-Electronic Medical Register for Facial Anomalies. Currently, the register has information on more than 1300 patients with Cleft Lip and Palate and over 300 patients with other facial anomalies. As a method for assessing preoperative severity, the system introduced by Prof. Y. Anastasov was used, which differentiates patients not only according to the type of cleft - unilateral, bilateral, but also according to the area of the defect and the associated deformities.

Statistical methods – metric, categorical, rank, binary methods were used, and the metric values were checked for normal distribution using the Shapiro-Wilk test.

The surgical method used by the team was a modified Millard technique.

OWN STUDIES, RESULTS AND DISCUSSIONS:

Dr. Genov has presented his own studies systematically, following the four main tasks set, with an in-depth discussion and conclusions after each section. The results of the study under task 1. show statistical significance of the different preoperative severity of the cleft lip and nose in relation to the number of surgeries on the lip and/or nose - with greater preoperative severity we observe a greater number of surgeries. The preoperative assessment scale used by the team is proven to be a reliable prognostic marker for the upcoming therapeutic "burden" for each patient in relation to its shape. In the studies under task 2. the frequency of postoperative defects is discussed in the used protocol and surgical technique and a new classification of postoperative defects and corrections or clarifications in the existing classification of defects of the lip and nose are proposed. In the discussion of the dissertation on task 3, the dynamics in the evaluation of the results in different age groups in relation to the preoperative severity groups are evaluated. By introducing the Global Assessments in EMRFA, it is proven that for each age period there are different priority goals. The conclusions made on task 4. are key for the dissertation work. The author proves that the periodic follow-up of patients with VCU, with visiting a multidisciplinary team and creating new functionalities in the Electronic File through the option for "Virtual Consultation" is the gold standard for good medical practice and responds to the global trend towards personalized and telemedicine.

The final section **SUMMARY** presents a synthesized abstract of the discussions and conclusions made in the previous sections. The importance of the EMRFA for prospective follow-up is emphasized,

complementing and refining its functioning. This follow-up proves that the preoperative severity of the deformation assessed by anatomical criteria, and not the ICD diagnosis, determines the complexity, number of surgical interventions and the final result. The electronic record documents the evolution of the results following surgical correction or spontaneous evolution. Changes in the values of a certain defect in different age groups are proposed – different according to each surgical protocol. A "virtual consultation" function has been created, through which the patient or parent can not only communicate with the team, but also contribute to collecting information on the evolution of the result, and the reporting of the results with the necessary frequency in different age periods is defined in a clear and categorical manner by introducing the Global Scores in EMRFA. Thus, a new criterion for good practice is introduced - the percentage of consecutively followed patients compared to those initially included. It also proposes a criterion of "treatment efficacy" - an optimal result that can be achieved with a different number of surgical interventions for different groups of preoperative severity and even answers the question of what is the average number of surgical interventions required in relation to the preoperative condition of the patient.

CONCLUSIONS: The author makes four conclusions that fully correspond to the tasks set.

CONTRIBUTIONS: 8 original contributions and 4 confirmatory contributions are indicated. I believe that the contribution of the created EMDLA - Electronic medical record for facial anomalies for long-term follow-up of late results after primary and corrective lip and nose surgeries is incomparable and unique for our country. Adequate maintenance of this file allows for analysis of the most common defects after lip and nose surgery and their evolution over different periods through the possibility of global assessment of the results in different age periods, verifies the preoperative severity scale as a prognostic marker related to the need for additional corrective interventions, thereby increasing the efficiency of the follow-up itself. This allows for the creation of norms for the optimal number of surgical interventions, the duration of orthodontic and speech therapy treatment and thus predicts the therapeutic burden for patients and their parents.

BIBLIOGRAPHY:

The bibliography contains 209 literary sources – 29 in Cyrillic and 180 in Latin.

ABSTRACT: The abstract is presented on 64 pages – it presents the scientific work in a synthesized form and demonstrates the skills of the dissertation candidate for scientific analysis and independent scientific research.

PUBLICATIONS:

The dissertation candidate has a total of 3 full-text scientific publications in connection with the dissertation and 16 participations in scientific forums, of which 12 – in European and world forums.

CONCLUSION:

The dissertation contains scientific and applied scientific results that represent an original contribution to science and meet all the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria (ADSRB), the Regulations for the Implementation of the ADSRB and the Regulations for the Development of the Academic Staff of the Medical University - Plovdiv.

The dissertation shows that the doctoral student possesses theoretical knowledge and professional skills in the scientific specialty PLASTIC-RESTORATIVE AND AESTHETIC SURGERY, demonstrating qualities and skills for independent conduct of scientific research.

Due to the above, I confidently give my positive assessment of the conducted research presented in the dissertation and propose to the esteemed scientific jury to award the educational and scientific degree of 'doctor' to Dr. Ivan Genchev Ginev in the doctoral program in Plastic-Reconstructive and Aesthetic Surgery.

Plovdiv, 06.08.2025.

Reviewer:

Prof. Hristo Zhelyazkov, MD

Заличено на основание
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