

HEALTH MINISTRY OF UKRAINE
UZHGOROD NATIONAL UNIVERSITY
NATIONAL MEDICAL ACADEMY OF POSTGRADUATE
EDUCATION NAMED AFTER P.L. SHUPYK
ASSOCIATION OF FORENSIC MEDICS OF UKRAINE
ASSOCIATION OF FORENSIC DENTISTRY OF UKRAINE

*ABSTRACTS OF INTERNATIONAL
SCIENTIFIC CONFERENCE*

**“MODERN ADVANCES IN FORENSIC
SCIENCE AND EXPERTISE”**

29th of April – 2nd of May

UZHGOROD, 2015

Editorial Board:

President of Association of Forensic Dentistry of Ukraine, Dean of the Faculty of Dentistry of Uzhgorod National University, Doctor of Medical Sciences, Professor – Yevhen Kostenko

Head of the Forensic Department of National Medical Academy of Postgraduate Education named after P.L. Shupyk, Doctor of Medical Sciences, Professor – Volodymyr Mishalov

President of Association of Forensic Medics of Ukraine, Candidate of Medical Sciences, Associate Professor – Valeriy Voichneko

Head of the Department of Forensic Medicine and Medical Law of Bukovinian State Medical University, Doctor of Medical Sciences, Professor – Victor Bachinskiy

Head of the Main Forensic Bureau of Health Ministry of Ukraine, Candidate of Medical Sciences – Vitaliy Kondratenko

Head of the Department of Forensic Medicine of Kharkiv Medical Academy of Postgraduate Education, Doctor of Medical Sciences, Professor – Oleksandr Gurov

Doctor of Medical Sciences, Professor of Odessa National Medical University – Grigoriy Kryvda

Head of the Forensic Department of National Medical University named after O.O. Bohomolets, Doctor of Medical Sciences, Professor – Borys Mykhailychenko

Head of the Department of Medical Forensic Criminology of the Main Forensic Bureau of Health Ministry of Ukraine, Doctor of Medical Sciences, Professor – Oleg Filipchuk

Head of the Department of General Surgery of Uzhgorod National University, Doctor of Medical Sciences, Professor – Vasyl Shimon

Associate Professor of Forensic Department of National Medical Academy of Postgraduate Education named after P.L. Shupyk, Candidate of Medical Sciences – Alina Pletenetska

Secretary of Scientific and Research Centre of Forensic Dentistry – Myroslav Goncharuk-Khomyn

Organizing Committee:

President of Association of Forensic Dentistry of Ukraine, Dean of the Faculty of Dentistry of Uzhgorod National University, Doctor of Medical Sciences, Professor – Yevhen Kostenko

Head of the Forensic Department of National Medical Academy of Postgraduate Education named after P.L. Shupyk, Doctor of Medical Sciences, Professor – Volodymyr Mishalov

President of Association of Forensic Medics of Ukraine, Candidate of Medical Sciences, Associate Professor – Valeriy Voichneko

Head of the Department of Forensic Medicine and Medical Law of Bukovinian State Medical University, Doctor of Medical Sciences, Professor – Victor Bachinskiy

Head of the Main Forensic Bureau of Health Ministry of Ukraine, Candidate of Medical Sciences – Vitaliy Kondratenko

Head of the Department of Forensic Medicine of Kharkiv Medical Academy of Postgraduate Education, Doctor of Medical Sciences, Professor – Oleksandr Gurov

Doctor of Medical Sciences, Professor of Odessa National Medical University – Grigoriy Kryvda

Head of the Forensic Department of National Medical University named after O.O. Bohomolets, Doctor of Medical Sciences, Professor – Borys Mykhailychenko

Head of the Department of Forensic Medicine and Medical Law of Kharkiv National Medical University, Doctor of Medical Sciences, Professor – Vasyl Olhovsky

Head of the Transcarpathian Regional Forensic Bureau – Stepan Bodnar

Associate Professor of Surgical Department of Uzhgorod National University, Head of the Forensic Course, Candidate of Medical Sciences – Vasyl Fentsik

Secretary of Scientific and Research Centre of Forensic Dentistry – Myroslav Goncharuk-Khomyn

Abstracts collection devoted to scientific and practical achievements in forensic science, practice and education, forensic examination and criminology. Discussion of issues related to forensic science, practice and education, the results of which are advisable for use and implementation and at the educational activities of higher educational medical institutions for legal and practical work during forensics investigations.

© Yevhen Kostenko, Volodymyr Mishalov, Valeriy Voichneko, 2015

© Uzhgorod National University, National Medical Academy of Postgraduate Education,
Association of Forensic Dentistry of Ukraine, Association of Forensic Medics of Ukraine,
2015

POLTAVA

ALGORITHM FOR ANATOMICAL AND MORPHOLOGICAL TEETH FEATURES EVALUATION AND COMPERHANSIVE USE OF ODONTOLOGY AND ODONTOGLIFICAL PARAMETS IN FORENSIC DENTISTRY

V. Chernyak

Ukrainian Medical Stomatological Academy

Even considering the rapid development of contemporary dental diagnostic and therapeutic methods that surely extend possibilities of identification by dental status, classical odontological methods are still relevant among such progressive conditions. Particularly, the study of individual teeth, teeth groups, occlusal relations, especially tooth attrition signs, as well as vital intervention remain as informative category. Organizational, technical and financial terms do not always allow to carry out all identification activities, as new computer program supported by X-ray research methods, or molecular-genetic forensic expertise. Even despite the fact that numerous native authors refute long existed standards for anatomical and morphological characteristics, naming them as outdated, foreign literature samples emphasize the relevance and objectivity of specified criteria. Precise definition of evidence-based criteria for not only group determination or specific tooth position, but for some individual features remains as relevant today. Forensic experts during the identification of unknown persons are increasingly turning to the features of tooth-jaw system, that even under influence of variety environmental factors for a long time stores individual and group specific features. Based on the above, we proposed the investigation algorithm for anatomical and morphological features of teeth, and comprehensive study for individual

odontological and odontoglifical parameters. Such algorithm data can be used in forensic dentistry in general, and particularly during the identification of unknown persons, burnt, fragmented, skeletonized, and putrid-changed corpses. The value of individual dental status as the most meaningful criteria for expert practice remains relevant in today's conditions. Therefore, during analysis of forensic and forensic dental science and practical expert data, we proposed a variant for forensic examination realization by individual dental of odontoglyphic status depending on the circumstances. All expert investigations can be divided into several stages. Thus, the first stage comes with odontological teeth group features study, then the evaluation of individual odontoglyphic figure takes place. The last stage should especially consider molars with the signs of molatization and incisivation, and their odonto-anthropological options relations to adjacent teeth classes. Final stage includes determination the signs of tooth attrition by the combined histochemical staining (SHYK-calcified blue) with evaluation of tooth odontoglyphic attrition zones (Patent UA № 93687u, 10/10/2014, Certificate №19). Conclusions. A detailed study of odontological sings for all teeth classes and detection of molatization and incisivation features remains a relevant instrument during forensic identification of person by dental status.