REVISED TERMINOLOGY OF THE SENSORY ORGANS AS A PART OF TERMINOLOGIA NEUROANATOMICA

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After 20 years from last issue of anatomical nomenclature (Terminologia Anatomica) and 11 years from last issue of histological nomenclature (Terminologia Histologica), a revised and extended version of the anatomical and histological nomenclatures of the sensory organs appeared as an integral part of the newly established Terminologia Neuroanatomica (TNA), validated by the Executive Committee of the International Federation of Associations of Anatomists (IFAA) in 2016. It is freely accessible at http://FIPAT.library.dal.ca and the terms are arranged in five columns: Latin official term, British English official term, American English official term, Latin synonyms and English synonyms, completed with eponyms. It covers the olfactory, visual, vestibulocochlear and gustatory organs. The example of revised or added terms will be discussed as well terms which have stayed unincorporated, like Dua's layer.

FOSSA OCCIPITALIS MEDIANA

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Background. Fossa occipitalis mediana is a more correct term for fossa vermiana, a small depression above the foramen magnum, at the inferior divergence of the falx cerebelli.

Aim. The aim was to determine the prevalence and parameters and define the norm of the inferior margin of the crista occipitalis interna/sulcus sinus occipitalis to prevent confusion with fossa occipitalis mediana.

Material and Methods. 1042 dry skulls from collections of anatomical departments in the Czech Republic were examined. The fossa variants were classified into five categories.

Results and Discussion. The norm (missing fossa) was present in 710 (68.1%) skulls, the fossa occipitalis mediana was recorded in 309 (29.6%) — its type I in 264 (25.3%) and its type II in 45 (4.3%) — and other rare variants were registered in 23 (2.21%) of specimens.

Conclusions. Bony variants are closely related to the soft tissue variants and their knowledge is principal during surgical approach for preventing hemorrhage from dural venous sinuses.

CAN STUDENTS CONTRIBUTE TO WRITING AND EDITING A MORPHOLOGICAL TEXTBOOK?

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Key words: *anatomy, histology, education, textbook, memorix*

Many qualitative, detailed and sophisticated textbooks of anatomy and histology exist nowadays. But some students considered them as understanding and repetition. Others prefer different approach; especially the textbooks coming from America often do not correspond to requirements of middle and East European anatomy and histology demands and extent. We have made up a team of young teachers and students who have arranged together with and ragogists the original Memorix Educational System (MES). This system has allowed us to create a concise and an easy-to-learn textbooks of anatomy and histology, now translate from Czech to English, Italian, Polish and Hungarian languages. They comprise information from the general, systemic and topographic anatomy, and general and special histology, respectively, completed with clinically relevant remarks supported by 1500 simple illustrative schemes and dozens of microphotographs. Currently, an application for mobile phones is available for easy

repetition of anatomy. For details, visit the website www.memorixanatomy.com.

MODERN ASPECTS OF CLINICAL ANATOMY OF THE XXI CENTURY

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Key words: *clinical anatomy, radial anatomy, endoscopic anatomy, microsurgical anatomy*

The lecture reviews the concepts of modern clinical anatomy, its structure and content, the methodological foundations of clinical anatomical investigations and the application value for different sections of clinical medicine. Clinical anatomy (applied anatomy) is a scientific-applied direction of modern anatomy, studying the structure and topography of organs and regions in norm and in pathology in the interests of concrete clinical disciplines. In Russia the founder of clinical or applied anatomy was famous surgeon and anatomist N. I. Pirogov (1810–1881). Clinical anatomy began to develop intensively from the second half of the 22nd century. Modern clinical anatomy is characterized by a wide use of diagnostic methods of intravital imaging as methods of intravital anatomical research. On methods of study they distinguish radial (radiological, computer tomographycal, magnetic resonance tomographycal), ultrasound, and endoscopic anatomy. An important part of clinical anatomy is the modern microsurgical anatomy. The fundamental task of the modern clinical anatomy is the creation of an anatomy of a «living person». Clinical anatomy is the anatomical basis of diagnostic tomography, endoscopy, ultrasound scanning, many concrete clinical disciplines: surgery, neurosurgery, cardiosurgery, ophthalmosurgery, traumatology, obstetrics and gynecology, otorhinolaryngology and others.

SOME REGULARITY OF TOPOGRAPHIC-ANATOMICAL CHANGES AFTER OPERATIONS OF REMOVAL OF LARGE ORGANS

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Key words: *pneumonectomy, nephrectomy, postoperative changes, computed tomography*

Widespread introduction into clinical practice of methods of intravital imaging, especially computed tomography and magnetic resonance imaging, made it possible to investigate, on a new methodological basis, topographic and anatomical changes occurring in body cavities after large organ removal operations. We began to conduct such research since 2012. To present time, computer tomography investigations have been performed or are in the final stage after operations: the esophagus thoracic part resection (P. V. Samoilov, A. E. Rykov), pneumonectomy and lobectomy (M. N. Vasyukov), nephrectomy (Yu. V. Safronova). Already at this stage, the obtained results allow us to establish some general and local regularities of postoperative anatomical and topographic-anatomical changes. An important general regularity is the occurrence of a free cavity or interorgan space with local incidence or disappearance of intracavitary pressure. This circumstance is a decisive factor for postoperative displacements and deformations along the radii to the center of the cavities and spaces that have arisen. For the effects of pneumonectomy, the displacement of mediastinum with a turning of heart toward the free pleural cavity, a significant uplift of the corresponding cupula of diaphragm with underlying organs of superior floor of abdominal cavity, deformation of thoracic wall and spinal column are characteristic. Displacements are not only mobile in norm organs, but also organs that are well fixed (liver after right pneumonectomy and nephrectomy, pancreas after left-sided nephrectomy). Postoperative displacements of organs result in pronounced changes in topographical anatomy of entire thoracic and abdominal cavities, which require special clinical anatomical and functional researches. Revealed regularities make it possible to evaluate the role of known factors of fixation and stabilization of thoracic, abdominal and pelvic organs: a) interorganic anatomical connections and topographic-anatomical interactions, b) fixation of organs to cavity walls, large vessels presence of intracavity pressure. Among these factors the presence of intracavitary pressure has the greatest significance in stabilizing the position of organs located in the cavity.

DEPTH OF THE INVASION AND THE DENSITY OF NEOANGIOGENESIS IN SQUAMOUS CELL CARCINOMA OF LOWER LIP IN PATIENTS WITH AND WITHOUT METASTASIS IN NECK LYMPH NODES

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Key words: *neoangiogenesis, SCC of lower lip, depth of the invasion, CD34*

Background. Invasion of the malign cells and the neoangiogenesis (formation of new blood vessels from the existing capillaries) are processes by which the neoplasms exist, promote nutrition and metastasize.

Aim. Is to determine the progress of the malign process in SCC of lower lip in patients with and