



weak response to DNP. Cytoplasm of cells also enlightened, contains small sudan granules which located diffusely through out the all cytoplasm. It turns out poorly expressed stratification of layers of medullar substance.

**Conclusion.** Described changes that associated with a expressed functional tension of cells especially glomerular and fasciculate zones of the cortex and of medullar substance. We found changes in the adrenal glands which can also be an indicator of strengthening of compensatory-adaptive processes in the organ, which is under distress.

**Korobchanska A. B., Kolisnik I.L., Vasura V., Romanenko V. S.**  
**MACRO-MICROSCOPIC ANATOMY OF EXTRAORGANIC NERVES OF  
THE ADRENAL GLANDS**

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**The purpose** of this study was to investigate of individual anatomical variability and topography of nerves of the adrenal glands middle-aged people that performed by macro-microscopic preparation on the complexes of organs at the upper storey of the abdominal cavity of dead bodies for V.P. Vorobyov.

**Results.** These preparations allowed us to identify and later on their basis present in the form of anatomical schemes, two main forms of variability of the structure of the main sources of innervation of the adrenal glands – abdominal plexus: dispersed and concentrated. Dispersible form of structure of the abdominal plexus was prevailed in our preparations (21 preparations). We identified the concentrated form of structure of the abdominal plexus in fewer (9 preparations). For disperse form of structure of the abdominal plexus is characterized the presence of 6 and more ganglions in polygonal shape that are placed asymmetrically on the right and left sides of the abdominal aorta. In this form of structure of the human abdominal plexus we additionally described two variants of structure of nerves of the adrenal glands. The first variant - 12 preparations (54% of cases) the prevalence of extraorganic nerves (10 or more trunks) of the left adrenal gland. These second variant - 9 preparations (46% of cases) the prevalence of outside organ nerves of the right adrenal gland. On preparations of concentrated form of structure of the abdominal plexus the last presented by 2 - 4 large ganglions that have semilunar shape. In this case, there is one variant of structure of nerves of the adrenal glands – the prevalence of number of extraorganic nerves of the left adrenal gland.

**Conclusions.** Thus, analyzing the received materials of macro-microscopic anatomy of extraorganic nerves of adrenal glands of human, we can conclude that their anatomy depends on the shape of structure, quantity and features of their sources of blood supply, as well as the forms of structure of the main source of innervation – of the abdominal plexus.

**Kotlobaj M., Ladnaya I.V., Krivchenko Yu. V.**  
**PECULIARITIES OF THE INNERVATIONS OF THE SUPRAHYOID AND  
INFRAHYOID MUSCLES OF THE NECK AND THEIR PRACTICAL  
IMPORTANCE**

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**Introduction.** Study of the problems of skeletal muscles innervation considering an individual variability of their neuromuscular apparatus has great importance in connection



with development of neuro- and myoplasty, that are especially based on microsurgery technique.

**Material and methods.** The research was carried out on 55 corpses of people at the juvenile, mature and old age. The macromicroscopic, histological and morphometric methods of research were used in the work. 225 series of microscopic preparations of the nerves were studied.

**Results.** Our research has shown some regularities in the extraorganic and intraorganic innervations of the muscles and the character of their intratruncal structure. Special emphasis was given to the study of the relations between metric indications of the given group of muscles and quantitative characteristics of the myeloarchitectonic of their nerves. The correlation between individual peculiarities of the structure of the lower jaw and the configuration of the nerve branching in the mylohyoid muscle was determined. In a dolichomorphic lower jaw mainly the magistral type of the branching is observed, in a brachymorphic one the scattered type is observed and in a mesomorphic the mixed or scattered types are present. Innervation of the infrahyoid muscles of the neck in studied preparations was from cervical loop. Two main forms of position of cervical loop relatively to the internal jugular vein were marked. First – position of the cervical loop was externally to the internal jugular vein. Second – position of the cervical loop was internally to the internal jugular vein. The cervical loop was absent in two preparations. We found that cervical loop had inferior position in persons with short neck (8 preparations) and mainly cervical loop had superior position in persons with long neck (12 preparations). There was asymmetry in formation of cervical loop and nerves which originate from it (from left and right sides). The sizes of muscles changed depend on shape of the neck. Sternohyoid muscle was longer in persons with long neck, than with short one. We revealed that sternohyoid muscle was innervated by one or three nerve branches, from cervical loop. Three variants of innervations of this muscle were determined. The investigation has shown that size and volume of muscles depend on the shape of a lower jaw and a neck. Individual variability in the topography and in the amount of nervous branches which come to the muscles was observed in the innervation of the studied muscles. Constant sources of innervation have been determined and additional sources of innervation have been identified. Intermuscular nervous connections were found between the nerves of the muscles of the right and left sides. Peculiarities of the intramuscular nerve branching and the regions of their peak concentration for each of the nerves have been determined.

**Conclusion.** The our findings may be of importance for solving the problems in operative intervention in the region of the neck.

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**HEALTH RESEARCH IN PERSONS WITH INDIVIDUAL**  
**CHARACTERISTICS OF DIURNAL CHRONOTYPE**  
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**Introduction.** All life on our planet is exposed to rhythmic processes. Biorhythms and chronotype are connected with the rhythm of external influences, which are inherent in any living organism. This allows organisms to live in harmony with the natural cyclical processes. Person's health and ability to work dependent on the optimal interaction of individual biorhythm and external rhythm environment directly. According to scientific