# *PARAVASAL NERVES OF THE HUMAN STOMACH AT THE STAGES OF ONTOGENESIS*

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# *ПАРАВАЗАЛЬНЫЕ НЕРВЫ ЖЕЛУДКА ЧЕЛОВЕКА НА ЭТАПАХ ОНТОГЕНЕЗА*

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Problem of research of age regularities of development of human organs, systems and body shape is the subject of one of the important schools of modern morphology. Literature presents us no detailed information about age alterations in external and internal structure of nerves of human stomach.

Further research of peculiarities of structure of microvessels of human stomach, especially with the help of up-to-date methods, remains an urgent problem of modern morphology.

Morphogenesis of the structural organization of extra- and intravisceral nerves of human stomach on different levels with consideration of macro- and microscopic structure, histotopography, myeloarchitectonics and peculiarities of their relations with other structures of all the layers of stomach at the stages of ontogenesis was studied with the help of a set of classical and modern methods of research for the first time. Morphogenetical peculiarities of spatial organization of microcirculatory channel of myenteron and morphogenesis of its intramural nervous plexus in all its layers were defined for the first time. Original materials in forming myeloarchitectonics of gastric nerves of vagal trunks and paravasal nerves of arteries of stomach in its different parts and differenent age groups are obtained.

Paravasal nerves of stomach are situated in perivascular connective tissue and directly in adventitial layer of dermal artery in the form of ramulous reticle. As far as the artery wall is concerned, three zones of concentration of paravasal nerves can be marked out: the first-internal, where the paravasal nerves are practically absent; the second-medium, where the majority of the paravasal nerves lies; and the third-external, where the concentration of the paravasal nerves slowly comes down to zero.

Among the intramural nerve plexuses of stomach the musculo-intestinal nervous plexus is the most developed, it is situated in the connective tissue layers of its muscular layer. The nerve ganglia of the musculo-intestinal plexus are composed of different number of multipolar neurons.

Age alterations of intramural nerve cells and of development of their nerve fibers.

Particularly, the musculo-intestinal nervous plexus of the newborns is ramulous. Nerve cells in the knots of the plexus lack sprouts and remind of neuroblasts. Submucous and subserous nerve plexuses aren't evident. In the young age intramural nerve plexuses of stomach take the formed definitive shape typical for the mature age. In the elderly and old age the cells and nerve fibers of the intramural nerve plexuses have the features of degenerative-dystrophic alterations.

Thus, the research executed deepens and complements the existing facts about the morphofunctional peculiarities of myeloarchitectonics of stomach nerves of vagal trunks, its paravasal nerves and spatial organization of the spatial organization of microcirculatory bed.