Myeloarchitectonic of nerves in gastro-hepatic ligament in the presence of additional left hepatic artery

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Relevance of the topic: This research is of great practical importance in performing surgical operations on the gastro-hepatic ligament with minimal damage to the nerve fibers.

Keywords: analysis of myeloarchitectonic of nerves; gastro-hepatic ligament; extra left hepatic artery; a branch of the vagus trunk before; perivascular nerve plexus; small, medium and large fibers.

At the heart of our research is an analysis of myeloarchitectonic of nerves in gastro-hepatic ligament in the presence of additional left hepatic artery. In the absence of the vessel the bulk of nerve trunks formed of the branches of the anterior vagus trunk, and in the presence of the vessel - perivascular nerve plexus with branches of the upper gastric plexus. Described differences leave their imprint both on the number and on the myeloarchitectonic of nerves.

In the presence of well-developed plexus accompanying the extra left hepatic artery, his nerves contain 85.5% of small fibers, 9.15 average and 5.5% large fibers. With a weak development of the epithelium (absence of vessel) is determined 96.2% of small, medium and 3.2% to 0.6% of large fibers.

It should be noted that, according to the data by G.V.Stovicheko (1978.1987), P.I.Lobko (1976) and other authors, medium, and large fibers in the preparations of the abdominal cavity are connected with neyrotisatamispinno-brain-nodes and reach them sympathetic nerves.

Thus, it can be assumed that in some cases in the nerves that lie in gastric-hepatic ligament, nerve conductors of bulbar nature (in fiber diameter thin) are dominated. In others predominate conductors of spinal origin (greater quantity of fibers of average and large diameters). Our data have a certain scientific-theoretical and practical significance.