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Intratruncal structure of the nerves of plexus lienalis in humans

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At present, there is growing interest in studying the individual variability of the intra and extra organic splenic nerves topography. New organ-retaining surgical interventions and segmental resections of this organ have been developed. The methods described by Krutsay and Bilshovskogo-Gross were used to study myelin fibres in macro-microscopic research of the plexus lienalis.

On histological nerve preparations of the plexus lienalis, intratruncal fibre structure was studied. Sections were made at the level of origin of the splenic arteria from the celiac trunk and in the place of its branching into zonal arteries. Sections were also made at the level of zonal and segmental arteries. While studying the nerve fibre structure, sizes of transverse sections of the nerves, sizes and quantities of bunches, development of the connective tissue sheaths was also considered. It was noticed that some nerve fiber bunches were located frequently in the trunk while some were less common. The epineuria were embedded in numerous little spaces between fibres. Most nerves had only one bunch. Some nerve bunches had vessels in the endoneurium. Bunches had round, oval or triangular appearances in transverse sections. The quantity of myelin fibers on the same layer using different specimens differed. The number of big myelin fibers in bunches decreased distally as plexus lienalis approached the splenic gates. The myelin sheaths of the nerves almost disappear around eighty to ninety years. It can be concluded, that the fickleness of the intratruncal structure depends on how scattered the nerve fibres are. This is due to the separate development of connective tissue sheaths in the trunk of the splenic plexus.