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Morphological Characteristics and Cytoarchitecture of the Myenteric Ganglia in the Rat Proximal Colon

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The myenteric plexus, which consists of interconnected ganglia, has been a subject of interest since its discovery in the late nineteenth century. In our study we focus on the morphology of these ganglia, when observed on routine sections through the rat intestinal wall of a randomly chosen segment, in this case the proximal colon. After applying routine histological methods, we found myenteric neurons of variable shape and size, interspersed between enteric glial cells and nerve fibers. Although the exact morphological type cannot be surely determined, the presence or absence of short and broad neuronal processes may lead the examiner to a conclusion about the major morphological group, which it belongs to. In conclusion, the sections are still one of the simplest and, therefore, frequently used methods of examination of the enteric nervous system, because they provide basic, but valuable information about the cytoarchitecture of the enteric ganglia.

Key words: enteric neurons, myenteric plexus, morphology, cytoarchitecture.