

FORMATION OF THE INTRAMURAL NERVE APPARATUS IN THE TESTICLES OF THE RATS IN ONTOGENESIS

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Annotation. In this work, the appearance of myelinic and unmyelinated nerve fibers in the structure of the testicles of rats in different periods of ontogenesis was investigated. It was determined that unmyelinated nerve fibers appear in the early stages of ontogenesis, myelinated - at a later stages.

Introduction. The innervation of the testis occurs by the testicular sympathetic plexus from the pelvic plexus, parasympathetic - internal pelvic nerves. The supply of testicle involves the nerves of the lumbar and sacral plexuses - the ilio-inguinal, femoral-genital, femoral, obturator, genital nerves.

Key words: testicle, nerve, ontogenesis, rats.

Purpose of the research. In this work the purpose was the studying of the intramural nerves of the testis in ontogenesis.

Materials and methods of research. The study done on white rats at the age of 1,5,7,10,15,20,25,30,45,60 days.

Research results. The unmyelated fibres of thin neonate rats were found in the mediastinum region which then germinated into the tunica albuginea and at the of age seven days were sometimes compensated into little nerves. Along separate nerve guides there were varicose ectasis. At the age of ten days nerve fibers began to sometimes be found near blood vessels in the parenchyma of the sexual gland. On the twentieth day of ontogenesis nerve elements in small quantitiens were found in different parts of the testis parenchyma outside of the vessels, and their friable plexuses were formed in different parts of the mediastinum.

During the puberty period, nerve fibers were found mostly in the mediastinum, also in tunica albuginea and under it, all over the gonad surface.

Conclusions. Thus, an improvement of the testis functional activity in ontogenesis was accompanied by the development of afferent and efferent innervation in all layers of the gland, the formation of the intramural nervous system of rat testis mainly ends with the onset of puberty.