Morphological characteristics and distribution of the autonomic and sensitive innervation of the prostate in some animal species

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SUMMARY

The sensitive and autonomic innervation of the prostate was studied in some mammals (rat, rabbit, horse, donkey and bull) using gold chloride impregnation. In all the species considered the gland was supplied with conspicuous innervation located in the thickness of the capsule and in trabeculae.

The autonomic innervation was constituted by ganglion cells of different sizes (small, medium and large), isolated or in groups of large ganglia also, always located along the course of nerve bundles.

The sensitive nervous component, placed more frequently in the most superficial layer of the capsule, consisted of delicate networks originating by more fibres and, above all, of capsulated receptors such as Pacini and Golgi-Mazzoni corpuscles.

A characteristic finding, but only present in the horse, donkey and bull, was the helicoidal disposition of thin collagen fibres around thin nervous bundles that ended up to the point where the nerve trunk divided.