

which confirms the role of these factors in the pathogenesis of the phenomenon of neovascularization and recurrent varicose veins.

Conclusion: In addition to surgical treatment of varicose veins, which includes various methods of prevention of the phenomenon of neovascularization (anatomical barriers, selective crosssection, endothelial inversion), antiangiogenic therapy gets a new large aspect directed towards receptors VEGFR-3 and its ligands VEGF-C/VEGF-D. They are directly involved in the process of formation of new, tortuous vessels and development of severe venous insufficiency.

Key words: Endothelial growth factors, neovascularization, varices.

252. FEATURES OF RECIPROCAL INTERACTION AS COORDINATION OF MOTOR AND CARDIAC FUNCTIONS

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Introduction: Reciprocation is the coordination of 2 activity centers. The majority of works were devoted to the reciprocal interactions of motor centers; but much less attention was given to the phenomenon of vegetative function regulation.

Aim: To study the features of reciprocal interaction of sympathetic and parasympathetic divisions of autonomic nervous system.

Materials and methodology: A group of male rats Wistar (n = 12) weighing 250-300 g was used for experiment. The first stage of the experiment was to check the heart rate during food procuring movements in normal rats (n = 8) with normal, stable motor skills. There was the phenomenon of short-term motor bradycardia during the movement. The second stage of the experiment was to register the heart rate during food procuring movement in rats influenced by an intraperitoneal atropine (1.7 mg/kg) injection, in order to exclude vagal effect on heart function.

Results: Pharmacological blockage of the vagus nerve by atropine causes a significant increase (p<0.05) in heart rate background 11% to the value of 487 ± 10.1 BPM, but not to “rule out” the phenomenon of short-term motor bradycardia during the food procuring movement.

Conclusion: The reciprocal innervation of antagonistic muscles and heart have their similarities and differences. This can have 3 levels of regulation and 2 opposing processes (excitation and inhibition) in the reciprocal organization. The working body (or an interconnected group) (lower level) gets antagonistic innervation from two centers (average level). It can predict that the presence of a higher level which causes excitation of one center and simultaneous inhibition of the antagonistic center.

Key words: Reciprocation, heart rate, rats, atropine.