

Adrenergic innervation of the tunica media in the saphenous artery of the fetal and newborn guinea-pig

Abstract:

Previous studies have demonstrated that adrenergic nerves are located in the medial-adventitial border of the muscular arteries. Observations made in this study have revealed that adrenergic nerves penetrate into the outer medial layer of the saphenous artery in fetal and newborn guinea-pigs, while in the adult these nerves are located in the medial-adventitial border. It is proposed that the adrenergic nerves located in the tunica media may have a trophic effect on the medial smooth muscle. It is further suggested that the final refinement of the dual control system of arterial walls, by nerves and circulating catecholamines, involves exclusion of adrenergic nerves from the tunica media.