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A STUDY ON THE ANGIOARCHITECTURE OF CARP

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The arterial and venous system of carp (*Cyprinus carpio*) was investigated by making Technovit or Mercox corrosion cast preparations and using the histological method. The results obtained in this study are as follows:

1. Four pairs of afferent and efferent branchial arteries, a pair of afferent and efferent pseudobranchial arteries and a pair of internal and external carotid arteries were identified in the cephalic region. In the trunk region, dorsal aorta, caudal artery, a pair of subclavian and iliac arteries, celiaco-mesenteric artery, posterior mesenteric artery and variable number of segmental arteries were identified. Hepatic arteries, splenic artery, gallbladder artery, anterior, median and posterior branch of celiaco-mesenteric artery supplied the visceral organs. In the venous vascular system, a pair of anterior cardinal veins and an inferior jugular vein were major veins from the cephalic region. Caudal vein, a pair of renal portal veins, a pair of posterior cardinal veins and number of segmental veins were identified in the trunk region. Posterior mesenteric vein, hepatic portal vein and two or three hepatic veins were the major veins from the visceral organs.
2. Divergent variations in each artery and vein were studied. Peculiar variations in divergent points were noted in segmental arteries, iliac arteries and the inferior jugular vein. Also, a slight variation was noted in the vasculating area of the celiaco-mesenteric artery, posterior cardinal vein and hepatic vein. On the other hand, there were no variations in the branching parttern of afferent branchial arteries, internal and external carotid arteries, subclavian arteries and celiaco-mesenteric artery.
3. The intestine was divided into three main portions due to the number of small arteries in the mucous membrane and to the histological features in the intestinal wall. The wall of the intestinal bulb had a thicker mucous membrane and a predominant arterial and capillary network as compared with that of the other lower two parts.