

INTRAPARENCHIMAL SEGMENTAR DIVISION OF THE RENAL ARTERIES IN BUFFALOS (*Bubalus bubalis* Linnaeus, 1758) OF THE JAFFARABADI RACE

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Considering the importance of the recognition of a pattern of distribution of the blood vessels in the parenchyma of some organs, the present work, of the interest of comparative anatomy, aims to study details of the territorial behavior followed by branches of the renal arteries, in the parenchyma of the kidney of buffalos. For such purpose, thirty pairs of kidneys from adult male and female Jaffarabadi buffalos, were collected at slaughterhouses from the Western Region of Paraná State. Fifteen of such pairs after canulation of their renal arteries were injected with vinyl acetate and then submitted to the process of acid erosion by means of a 30% solution of sulfuric acid with the purpose of obtaining the arterial vascular molds; the other fifteen pairs were injected with a solution of colored Neoprene latex and soon after fixed in a 10% formalin aqueous solution and then dissected. Up to the present moment fifteen of the original thirty pairs of kidneys, submitted to the two procedures described, were thoroughly studied and giving the following results: a) the renal arteries of the buffalo, after their origin in the lateral face of the aorta become separated in two branches, cranial and caudal, guided for portions corresponding of those organs; these branches are called sectorial branches, because they characterize the cranial and caudal renal vascular sections; b) in the left kidney, the cranial sectorial branch originates five to eight segmentary branches guided towards inner territories (segments), with projection in the surface of the organ; the caudal sectorial branch already emits, still in the left kidney, five to six segmentary branches; c) in the right kidney, the cranial sectorial branch sends four to seven segmentary branches; the caudal sectorial branch already emits four to eight segmentary branches; d) of the segmentary arterial branches, from both vascular sections, appear branches that are projected for the periphery of the organ. They cross their capsule and reach the perirenal fat; e) the segmentary branches define vascular territories, without anastomosis connecting them.

Key Words: anatomy, segmentation, kidneys, buffalos.