



Morphological Studies on the Peripheral Circulation of the Ovary in One-Humped Camel (*Camelus dromedarius*)

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Abstract:

Histological examination of the peripheral circulation of the ovary of 18 females of the one-humped camel revealed a series of blood vessels with special structures. Throttle or occlusive artery was recorded in the ovarian zona vasculosa and in the cortex, and it showed an intimal cushion-like thickening made up of intimal bolsters that formed of smooth muscle fibres and glomus cells. The smooth muscle cells of the tunica media and the tunica adventitia of throttle artery pursued a circumferential pattern. Anastomosis arteriovenosa included simple bridge-like anastomotic vessels between arteria and venae, and glomus vessels of typical structure were demonstrated. Glomus organs were recorded in the ovary and were comprised of the tortuous glomus vessels and the related afferent and efferent vessels. Glomus cell complexes also were commonly occur at the cortex ovarii that possessed an extremely convoluted course with a hyperplastic wall and a narrow lumen. Atypical glomus vessels were demonstrated within the ovarian zona vasculosa, and the wall of these vessels was relatively thick and consisted of double tunica media with an intimal bolster. Some vessels contained an intimal bolster device of exclusively glomus cell structure (glomus bolster) with a tunica elastic interna demarcated it from the glomus cell media. Some venae represented several layers of longitudinally arranged smooth muscle fibres in the tunica media. Other venae showed wall with variable thickness. Venae with double muscular tunica media were recorded in the medulla. Some venae showed double internal elastic lamina. Also, venae with thick adventitia contained dispersed smooth muscle fibres were determined. Spirally oriented arteriole and venule were demonstrated within the cortex and medulla ovarii. Gestation sclerosis was demonstrated in ovarian zona vasculosa of pregnant females.

Keywords:

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