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NEUROPEPTIDES IN THE PANCREAS OF DROMEDARY CAMEL: IMMUNOHISTOCHEMICAL LOCALISATION

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ABSTRACT

The persent study is aimed to identify and localise some of the neuropeptides that may be present in the camel pancreas using the immunohistochemical techniques. The specimens from 5 camels (*Camelus dromedarius*) of both sexes at different ages (2-12 years) were used. The neuropeptides, calcitonin gene-related peptide (CGRP), Substance P (SP), Vasoactive Intestinal Polypeptide (VIP) and Cholecystokinin (CCK-8) were detected in the camel pancreas by light microscope immunohistochemistry. The current findings indicated that, the dromedary camel pancreas contains several neuropeptides including CGRP, SP, VIP and CCK-8. The CGRP immunoreactivity was located in nerve fibres of the parenchyma and some ganglion cells. The SP stained cells in the pancreatic islets were located at the peripheral parts and the VIP immunoreactive nerve fibres were distributed throughout the exocrine and endocrine portions of the camel pancreas. The CCK-8 was found in varicose nerves innervating acinar cells and the blood vessels of the pancreas and also found in the endocrine cells. In conclusion, the pancreatic tissues and islets contained several neuropeptides which are probably involved in the regulation of pancreas locally.

Key words: Dromedary camel, immunohistochemistry, neuropeptides, pancreas