

ULTRASTRUCTURAL AND MORPHOMETRIC STUDIES ON THE PROSTATE GLAND OF THE ONE-HUMPED CAMEL (*Camelus dromedarius*)

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ABSTRACT

The prostate glands of 40 camels were studied histologically, ultrastructurally and morphometrically. The alveolus of the gland was lined with one layer of low to high columnar cells (17.6 μm). Dark and light cells were characterised by the presence of spherical nuclei and numerous organelles. Large numbers of secretory granules, numerous vacuoles and lipid droplets were also observed. These may be 2 different cell types or stages of the development. Basal cells were characterised by large dense nuclei and they were generally poor in organelles. The mean volumes of the gland was 28.81 cm^3 . The volume densities (V_v) and the total number of the different components of the prostate gland were determined by the standard morphometric methods. The glandular tissue formed 52.91% of the volume of the gland, followed by 34.68% connective tissue and muscle.

Key words: Camel, morphometry, prostate gland, ultrastructure