



## Morphological Studies on the Epididymal Duct of the One-Humped Camel (*Camelus Dromedaries*)

**PDF** (Size: 2082KB) PP. 245-254 DOI: 10.4236/ojvm.2012.24040

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### ABSTRACT

The present work was carried out on 20 epididymes of sexually mature one humped camel to elucidate the gross anatomical, scanning electron microscopical and light microscopical features of the epididymal duct. Anatomically, the epididymal duct of camel consists of three parts i.e. head, body and tail. Histomorphologically, the epididymal duct is subdivided into initial, middle and terminal segments, of which the middle segment is further subdivided into proximal, intermediate and distal parts. The epithelium lining the epididymal duct is ciliated pseudostratified columnar comprising mainly five cell types, namely principal, basal, apical, dark and halo cells. It displays numerous intraepithelial glands in the middle segment. In general, there is a gradual increase in the total diameter and decrease in the epithelial height of the epididymal duct from the initial to the terminal segments; that may, mechanically, facilities passage of the sperms toward the terminal segment. The lamina propria of the epididymal duct contains a layer of interlacing elastic fibers which may allow adequate elasticity of the duct that could help in its expansion. Moreover it is surrounded by numerous layers of circularly and obliquely arranged smooth muscle fibers which always increase in thickness toward the terminal segment.

### KEYWORDS

Epididymal Duct; Camel; Morphology

### Cite this paper

A. E. Zayed, K. Aly, I. A. Ibrahim and F. M. Abd El-Maksoud, "Morphological Studies on the Epididymal Duct of the One-Humped Camel (*Camelus Dromedaries*)," *Open Journal of Veterinary Medicine*, Vol. 2 No. 4, 2012, pp. 245-254. doi: 10.4236/ojvm.2012.24040.

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