

Gross Anatomical and Ultra Structural Microscopic Studies on the Nose of the Dromedary Camel (*Camelus Dromederius*)

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Abstract : The current study was carried out on the nose of seventeenth healthy adult camels. Specimens were collected from slaughter houses then fixed, dissected and photographed. For ultra structural studies, fresh samples were fixed in different fixatives and prepared for examination by light, scanning and electron microscopes. Grossly, nose of the camel had narrow nostrils, slit like in outline. In the nasal cavity, the nasal vestibule was narrow and has scanty dorsal and lateral cartilaginous support. The Nasal conchae (dorsal, middle and ventral) enclosed the dorsal, middle conchal sinuses and no ventral conchal sinus; instead there was recess and bull a. The ethmoidal conchae (8 in number) were noticeably fewer than in the other domestic animals like ox and horse. The olfactory mucosa was restricted to a small area covering the caudal parts of the ethmoidal conchae. The lining epithelium of the nasal cavity changes gradually from stratified squamous epithelium in the nasal vestibule to pseudo stratified columnar ciliated in the respiratory region and finally, olfactory epithelium covering the caudal parts of the ethmoidal conchae. In the dromedary camel, a special feature was the presence of dense and relatively long hair covering the nostrils and the rostral part of the nasal vestibule. In conclusion, the anatomical features of the nose of the dromedary camel, especially in its rostral parts enable this animal to breathe properly in the sandy dry weather.

Keywords : camel nose, anatomy, dromedary camel, nasal vestibule

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