



Cairo University  
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# **Morphological Studies on the Pharynx in the Goat (Capra Hircus)**

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**Abstract**

The present work was carried out to give adequate information on the anatomy and histology of the pharynx in the goat which might be helpful for further studies to both under and post graduate students. Thirty heads from adult apparent healthy goats of both sexes were collected from Giza governorate. The results showed that the pharynx of the goat had an irregular funnel shape. It extended from the caudal end of the horizontal lamina of the palatine bone caudoventrally up to the level of the caudal border of the wing of the atlas. The pharyngeal fornix was smooth, concave and divided by the septum pharyngis into two deep narrow cavities. The pharyngeal opening of the auditory tube was crescent slit like situated at the caudodorsal part of the lateral wall of the nasopharynx. Both the Tonsilla pharyngea and the Tonsilla tubaria observed microscopically only. The oropharynx was short, wide and dilatable. The palatine tonsil was located on the caudal third of the lateral wall of the oropharynx. The pharynx of the goat received its arterial blood supply via the ascending pharyngeal, ascending palatine arteries, and the pharyngeal branches of the cranial thyroid, cranial laryngeal and Rr.musculares of the lingual artery. The soft palate was vascularized through lesser palatine artery in addition to the branches of the pterygoid artery of the maxillary artery. The blood was drained through the pharyngeal branches of the cranial thyroid, caudal laryngeal, maxillary and pterygoid veins in addition to the lesser palatine vein. The results obtained were discussed with the available literatures in the domestic animals.

**Key words: Goat, Pharynx, Soft palate, Morphology.**

# DEDICATION

*This work is dedicated to my family members for  
their unconditional love, encouragement and care*

*With all my love and gratitude*

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## **Chapter (1)**

### **Introduction**

# INTRODUCTION

Goats were the first farm animals to be domesticated. As indicated by the archaeological evidence, they have been associated with man in a symbiotic relationship for up to 10,000 years (Ensminger and Parker, 1986).

In the last few decades, the anatomy of the goat has attracted the attention of several veterinary anatomists. The goat is used for many purposes including biomedical research, meat and milk production.

In Egypt, there are more than three million heads of goats raised primarily in three regions; the Upper Egypt, Nile delta and in the desert range- lands (Faostat, 2011).

The importance of the pharynx as an organ disposed between two important systems. Food and air cross through the pharynx in their way to the esophagus or larynx and also during regurgitation of food in ruminants pharynx plays an important role in directing them to their right way and prevent choking (Wally, 1989).

The pharynx could also be attributed to the presence of tonsils and solitary lymph nodules, which perform an essential defense mechanism against the ingested or inhaled pathogenic microorganism (Bahgat,1991).

On revising what has been written on the pharynx of the goat, we found it is inadequate, so the present work is carried out to give complete information on the Anatomy and Histology of the pharynx in the goat which may be helpful for further studies to both under and post graduate students. In addition to some benefit for veterinarians in all fields of veterinary medicine.



## **Chapter (2)**

### **Review of literature**