Gross Anatomical, Light and Scanning Electron Microscopic Studies on the Pharyngeal Roof of Turkey (Meleagris gallopavo): Comparative Study


Abstract:

The present study was carried out to investigate the histomorphological features of the turkey's pharyngeal roof using light and scanning electron microscopy. Studied parts from the roof of the turkey's pharynx were processed and stained by conventional stains to illustrate the mucosa, salivary glands, and connective tissue infiltration. Also, Scanning electron investigations were applied on pharyngeal papillae and pharyngeoseophageal junction. Grossly, the pharyngeal roof was shown to constitute about 12.27% of the oropharyngeal roof length, continue rostrally with the oral roof at the level located between the choanal and infundibular slits, and terminate caudally at the pharyngeoesophageal junction, demarcated by a transverse row of caudally directed conical papillae. Numerous different sized and shaped caudally directed pharyngeal papillae were distributed in the roof of the pharynx. Histologically, the pharyngeal mucosa demonstrated pharyngeal folds, intraepithelial mucous glands, abundant lymphoid infiltration and lymphatic nodules, in addition to intraepithelial sensory corpuscles. Numerous compound tubular mucous sphenopterygoid salivary glands were observed in the mucosa of the pharyngeal roof. This study in conclusion provided comprehensive information on the structure of the pharyngeal roof of the turkey, comparing these findings with those of other birds.

Keywords:

pharyngeal roof, SEM, the choana

Published In:

Journal of Advanced Veterinary Research , 6 , 112-117