

Abstract

Ostrich is among the birds of which their fosterage is expending for many reasons. Considering of the economic value of this bird (using of meat, feather, leather and the egg of ostrich) needs sufficient and pervasive results in different scientific aspects such as accurate discrimination of anatomy and tissue structures of body organs. The nervous system is the most complicated and important organ in body of birds. In this study ten African ostrich (male and female) with the weight average 110.5 kg and the ages average 310 days after carnage of this ostriches in slaughter houses of zabol city, the skull was immediately removed and opened so as to remove the entire brain; data from every part of the medulla oblongata and The beginning of the spinal cord were gathered with a sliding caliper and biopsy samples were taken from different parts of the medulla oblongata and The beginning of the spinal cord and then were studied from various aspects. Then statistical analysis was done and pictures were taken. In terms of morphology in the medulla oblongata ostrich was pyramid-shaped small size and shallow grooves that hardly seen. Also the first part of the spinal cord was smooth except for the front and rear longitudinal groove. After anatomic assessment, preparation levels of tissue was done with Autotechnicon machine and after preparing paraffin blocks from tissue fine and proper tissue incisions with 5 micron was done with microtome machine, furthermore, colouration was done including casual Haematoxilin and Eosin staining and specific PAS staining. Histologically, different parts of the first part of the spinal cord and medulla oblongata of ostriches no particular difference with other birds. White matter in cortical part and gray matter in central part of medulla oblongata and had no particular shape. More white matter tract in the spinal cord and spinal central duct epithelium was cubical stratified.

Key words: ostrich, anatomy, histology, medulla oblongata, spinal cord.



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Faculty of Veterinary Medicine
Department of Clinical Science

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Supervisor:

Dr. M. E. Akbari

Advisor:

Dr. A. Jamshidian

By:

M. Ahmadi

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