

Abstract:

Over the past two decades, ostrich breeding increase because of the Nutritious meat and low cholesterol levels. One of the best breeds in meat production is Sistani cow that in Sistan province in Sistan and Baluchestan state. As for the economic importance of these two species, it is necessary scientific studies in various fields, including the exact anatomical knowledge and the histology of various organs of the body. Our purpose in this study to compare the morphology and histology of African ostrich spinal cord with sistani cow. For this purpose, we selected randomly from butchery in Zabul city, 5 male and female African ostriches with a mean age of 371 days and a mean weight of 123 kg and as well 5 sistani cow with mean age of 3.5 years and mean weight of 533 kg. After the killing and removal skull skin and bones, the brain and spinal cord were completely removed and then all of the meristic, morphological, and biometric factors were recorded in all specimens. Morphologically, spinal cord measurements were performed .All of these parameters were larger in Sistani cow than the African ostrich, exception of the spinal cord height that was larger in the African ostrich. After morphological examination, tissue sampling was performed and by microtome was created thin and appropriate tissue sections with a thickness of 5 microns. Then it was done Hematoxylin and Eosin stains and proprietary strain of PAS. The slides stained was studied with optical microscope. In the African ostrich and Sistani cow, the meninges were from outside to inside, including dura mater, arachnoid and pia mater. The spinal cord was composed of two parts: white matter (on the outside) and gray matter (on the inside). The mean size of gray matter and white matter in an African ostrich was smaller than Sistani's cow.

Keywords: African ostrich, Sistani cow, Morphological, Histological, Spinal cord



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**Comparative histomorphological study of spinal
cord of African ostrich with spinal cord of Sistani
cow**

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