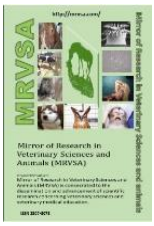
ORIGINAL ARTICLE **Mirror of Research in Veterinary Sciences and Animals MRVSA/ Open Access DOAJ**

Mirror of Research in Veterinary Sciences and Animals (MRVSA)
Journal homepage: http://mrvsa.com/
E-ISSN 2307-8073; 2520-324X (Print)



Morphological and histopathological study of Air Sacs (Sacci pneumatic) in Japanese quail (Coturnix coturnix japonica)

A.A. Sawad[1] *, Diaa A. Udah[2]

[1]Department of Anatomy, College of Veterinary Medicine, University of Basrah, Basrah, Iraq
[2]College of Nursing, University of Thi-Qar, Thi-Qar, Iraq

ARTICLE INFO
Received: 09.11.2012
Revised: 09.12.2012
Accepted: 20.12.2012
Publish online:25.12.2012

***Corresponding author:**
Email address:
alaasawad65@yahoo.com

Abstract

This study aimed to investigate the anatomical and histological features of air sacs in Japanese quail. Twenty healthy birds from Japanese quail (10 Males and 10 Females) were obtained for routine anatomical and histological study, 2 ml of 10% chloral hydrate was injected directly into the heart and then they were injected via trachea with a cold cure plastic mixture for corrosion cast making. The birds were immersions in 3% potassium hydroxide 40c for maceration, washing by tap water. Grossly, the quail had eight air sacs, four of these were paired, cranial thoracic, caudal thoracic, and abdominal air sacs, while the singular air sacs were the interclavicular and cervical. Histological investigation confirmed that the wall of air sack composed of a delicate single layer of squamous or cuboidal epithelial cells supported by a delicate layer of connective tissue.

To cite this article: Sawad A A and Udah A. Diaa. (2012). Morphological and histopathological study of Air Sacs (*Sacci pneumatic*) in Japanese Quail (*Coturnix coturnix japonica*). Mirror of Research in Veterinary Sciences and Animals. MRVSA. 1(1), 53-59.
DOI: 10.22428/mrvsa. 2307-8073.2012.00117.x

Keywords: Air sac, maceration, epithelium, corrosion cast.