Int.J.Curr.Microbiol.App.Sci (2018) *7*(4): 2700-2702

International Journal of Current Microbiology and Applied Sciences
***ISSN: 2319-7706* Volume 7 Number 04 (2018)**
Journal homepage: http://www.ijcmas.com

Original Research Article https://doi.org/10.20546/ijcmas.2018.704.308

Traumatic Proventriculitis in an Aseel Pullet

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Keywords

Aseel pullet, Hypodermic needle, Traumatic proventriculitis

Article Info

Accepted:
23 March 2018
Available Online:
10 April 2018

A B S T R A C T

Traumatic proventriculitis in an Aseel pullet caused by ingestion of a 16G hypodermic needle of 3 centimeters long with plastic hub. The gross pathologic lesions recorded in the case have been described.

Introduction

Presence of foreign bodies in the digestive tract of birds especially chicken and turkey are not uncommon.

But traumatic inflammation of avian digestive tract due to foreign bodies appeared to be a rare phenomenon.

Considering the paucity of information on this regard, a rare case of traumatic proventriculitis detected in a carcass of a country chicken, referred for post mortem examination at Veterinary University Training and Research Centre, Ramanathapuram district, Tamil Nadu, has been briefed in this article.

Materials and Methods

A carcass of an Aseel pullet weighing about 750 gram was brought to the Veterinary University Training and Research Centre, Ramanathapuram with the history of lethargy and anorexia for about 10 days and died of inanition.

Results and Discussion

On Post mortem examination, the crop was empty and the proventriculus was dilated. On incision the proventriculus contained undigested grains mixed with blackish red material. A 16G hypodermic needle with plastic hub was found piercing at the proximal

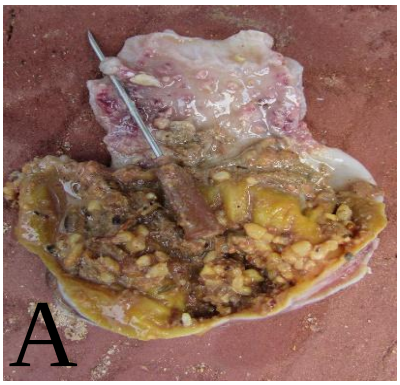
part of the proventriculus from mucosa to serosa. The shaft of needle was in the proventricular lumen and the hub was in the ventriculo-proventricular junction (Fig. 1A). The wall of the proventriculus in the site of injury was thick, haemorrhagic with granulomatous changes (Fig. 1B).

The bird was maintained under extensive rearing system in the backyard, where possible chances for the birds to get access with this type of hypodermic needles (Fig. 1C). The incidence of ingestion of the hypodermic needle in the present case might be due to starvation or any specific deficiency of micronutrients or might be of vices. The cause of death might be inanition, dehydration and toxaemia.

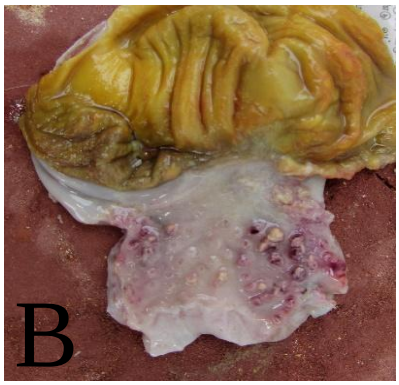
The death due to extreme emaciation and toxaemia due to traumatic ventriculitis in turkey (Balasubramaniam *et al.,* 2008) and layer birds (Musa *et al.,* 2009 and Musa *et al.,* 2011) were reported by the earlier workers. In the present case there was no much damage in the oesophagus, crop and other surrounding tissues, since the blunt part of the object, the hub of the needle had entered first followed by the sharp metallic shaft. As it reached the ventriculo-proventricular junction the sharp portion penetrated the wall of proventriculus due to contraction and grinding action of ventriculus.

The gradual off feed, weight loss, dull and depression followed by death might because of the severe pain and toxic effects. Gupta and Trapp (1971) reported the death of a rhea following anorexia due to traumatic proventriculitis. Rao and Acharjyo (1990) reported deaths due to obstructive vegetable sticks and thorns in green pigeon and white peacock. Similarly, Vijayalingam and Senthilkumar (2009) reported deaths in Turkey poults due to gizzard impaction. Shrivastav *et al.,* (1992) also had reported traumatic ventriculitis in a peacock.

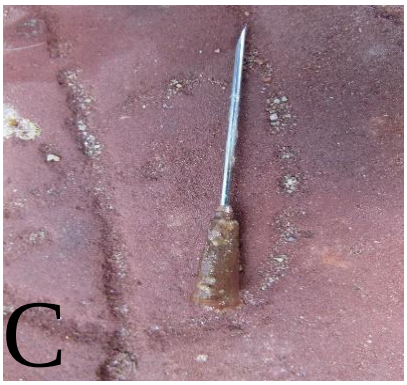
Fig.1



16G needle in situ-penetrating the proventriculus



Haemorrhagic granulomatous lesions in proventriculus



16G needle about 3 centimeter length

Foreign bodies in digestive tract of many birds may be a cause of impaction, enteritis, hepatitis (Rao and Acharjyo, 1990; Shrivastav *et al.,* 1992; Galav *et al.,* 2010) and traumatic Proventriculitis, as has been reported in the present communication.

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How to cite this article:

Vijayalingam, T.A., N.V. Rajesh and Ilavarasan, S. 2018. Traumatic Proventriculitis in an Aseel Pullet. *Int.J.Curr.Microbiol.App.Sci.* 7(04): 2700-2702.
doi: https://doi.org/10.20546/ijcmas.2018.704.308