

FREQUENCY AND PATHOMORPHOLOGICAL INVESTIGATIONS OF RIGHT OVIDUCT CYSTS IN LOHMANN BROWN STRAIN OF LAYING HENS AT SLAUGHTER LINE

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Abstract

Normally developed and reproductively active is only the left ovary and oviduct in domestic fowl (*Gallus domesticus*). However, few studies reported the presence of vestigial, cystic or even fully developed the right oviduct, ovary, either both. This study aimed to investigate the frequency and pathomorphology of this anomaly in the Lohmann Brown strain of the hens and thus provide useful data for the carcass examinations.

The research was conducted on 240 laying hens, the provenance of Lohmann Brown at 51 weeks of age. All birds were randomly selected from the commercial flock sent to the local slaughterhouse. Macroscopically examination of the right oviduct was performed and samples for detailed histopathological analysis were collected, fixed in 10% formalin and stained with haematoxylin and eosin.

The results showed that this anomaly occurs very often in this strain of the hens. In 28% of these birds, the cystic right oviduct was classified as small with a size less than 2 cm. In 58% of them, it was medium with size from 2 to 5 cm, while in 14% of the hens it was large, with size from 5.1 to 27.8 cm. In most of the hens, the right oviduct cyst contained serous, slightly opaque liquid, while in some the content was darkly brownish or dens, caseous material. On histopathological slides, the inflammatory changes were not identified.

In conclusion, this study shows that in Lohmann Brown strain of hens the cystic right oviduct is a quite common reproductive anomaly and during the carcass inspection and evisceration this structure should be carefully removed because it contains serous liquid whose content is likely suitable for distribution and growth of pathogenic microorganisms.

Key words: Hens, Right oviduct, Carcass, Pathology.