



First report of hepatitis-hydropericardium syndrome by Fowl Adenovirus in native hens

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Objectives: Adenoviruses are common infectious agents of chicken, turkey, and quail. Inclusion body hepatitis (IBH), hepatitis-hydropericardium syndrome (HHS), and adenovirus gizzard erosion (AGE) caused by Fowl adenovirus (FAV). To our knowledge, HHS has not been observed in a native hen flock in Iran.

Materials&Methods: Three 6-month-old native hens were referred for postmortem examination to veterinary clinic of Ferdowsi University of Mashhad following a 1-day history of lethargy and mortality. Some of macroscopic lesions were observed including hydronephrosis, splenomegaly, hydropericard, hepatic bleeding and necrosis, given in the order of severity. In order to accurately determine cause of death in the flock, histopathological method was applied for detection of the infection. The heart, kidney, spleen, and liver tissue samples were sent to pathology laboratory.

Results & Conclusion: In the histopathological investigations, lymphocytic hepatitis, basophilic intranuclear inclusion bodies in hepatocytes, severe hemorrhage in kidneys, and lymphocytic myocarditis were evident. Necropsy findings were suggestive of adenovirus infection. However, in this case, the adenovirus was not isolated successfully. This is the first report of Fowl adenovirus type A-associated HHS in the native hens of Mashhad, Iran.

Keywords: Hepatitis-hydropericardium syndrome, HHS, Adenovirus, native hen, Mashhad.