A case of aspergillosis outbreak in a broiler duck farm in Kelantan, Malaysia

ABSTRACT

Objective: This case report aims to discuss the veterinary approach taken to control a case of aspergillosis outbreak on a duck farm. Materials and methods: A broiler duck farm with a population of 900 Muscovy ducks was having a complaint of a 5% mortality rate in their 3-week-old ducklings. Upon presentation, 10% of the ducks appeared to be listless, dyspneic, ruffled feathers, and cyanotic. Postmortem examination of the dead birds was conducted. The collected samples were subjected to isolation and identification of the associated Aspergillus fumigatus under the microscope using the scotch tape method. Results: Postmortem examination revealed whitish to creamy caseous nodules in the lungs, thoracic air sacs, gizzard, proventriculus, and intestines. Granuloma lesions and infiltration of inflammatory cells were observed in the lung and liver tissues. As for therapeutic management, all ducks were treated with copper sulfate, erythromycin, and multivitamins as the fungicide, antibiotic, and supplement, respectively, via drinking water. Conclusion: There is no effective treatment for Aspergillosis as the spores are difficult to destroy completely. Nonetheless, the disease can be controlled and prevented effectively with proper farm sanitation and providing a suitable feed storage environment to inhibit the growth of this opportunistic fungus.

Keyword: Aspergillosis; Aspergillus fumigatus; Clinical diagnosis: Prevention; Treatment