

ABSTRAK

GAMBARAN HISTOPATOLOGIS KASUS *NEWCASTLE DISEASE* (ND) PADA AYAM DI SLEMAN, DAERAH ISTIMEWA YOGYAKARTA

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16/398151/KH/08922

Newcastle disease merupakan penyakit yang disebabkan oleh virus yang berasal dari genus *Avulavirus*. Penyakit ini menimbulkan gejala yang bervariasi mulai dari diare kehijauan, gangguan pernapasan hingga tortikolis, tergantung pada serotipe virus yang menginfeksi. Penularan yang cepat serta mortalitas yang dapat mencapai 100% menimbulkan kerugian yang cukup besar terutama pada pelaku usaha ternak unggas. Tujuan dari penelitian ini adalah mengetahui gambaran histopatologis organ otak, intestinum, proventrikulus, dan pulmo ayam (*Gallus gallus*) yang menunjukkan gejala *Newcastle disease*.

Bahan yang digunakan adalah 6 ekor ayam dari Kabupaten Sleman, Daerah Istimewa Yogyakarta dengan gejala menyerupai *Newcastle disease*. Sampel organ otak, intestinum, proventrikulus, dan pulmo diambil lalu dibuat preparat histopatologi dengan pewarnaan HE. Sampel otak digunakan untuk pengujian konfirmasi patogen dengan PCR.

Hasil penelitian menunjukkan perubahan patologis berupa kongesti dan hemoragi di hampir semua sampel organ yang diperiksa, *perivascular cuffing*, infiltrasi sel radang limfosit, nekrosis hemoragik proventrikulus dan intestinum.

Kata kunci: ayam (*Gallus gallus*), *Newcastle disease*, histopatologi

ABSTRACT

THE HISTOPATHOLOGICAL CHANGES FOR NEWCASTLE DISEASE CASES OF CHICKEN IN SLEMAN, SPECIAL REGION OF YOGYAKARTA

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Newcastle disease is caused by a virus that belongs to the genus of *Avulavirus*. This disease causes symptoms that range from greenish diarrhea, respiratory symptoms to torticollis, depending on the infectious viral serotype. Rapid transmission and mortality can reach 100% cause substantial losses of the poultry farmers. The purpose of this study to understand the histopathological changes of the brain, spleen, intestine, proventriculus, liver, and lungs of chicken (*Gallus gallus*) which showed symptoms of Newcastle disease.

Samples used in this study were 6 chickens from Sleman Regency, Special Region of Yogyakarta with typical symptoms of Newcastle disease. Samples of brains, intestines, proventriculuses, and lungs were taken to made histopathological preparates with HE staining. Brain samples were used to confirming the pathogen with PCR test.

The results showed pathological changes such as congestions and hemorrhages in almost all organ samples that were examined, perivascular cuffing, infiltration of lymphocytes, hemorrhagic necrosis of proventriculus and intestines.

Keywords: chickens (*Gallus gallus*), Newcastle disease, histopathology