

## **ABSTRAK**

### **GAMBARAN MAKROSKOPIS DAN MIKROSKOPIS ORGAN AYAM BROILER YANG DIINFEKSI BUATAN VIRUS *INCLUSION BODY HEPATITIS***

**Lisa Inamer Hidayati**  
**14/364659/KH/8090**

*Inclusion Body Hepatitis* (IBH) merupakan penyakit yang menyerang ayam broiler berusia tiga hingga tujuh minggu. Penyakit ini menyebabkan gangguan pertumbuhan ayam, *hepatomegaly*, hepar berwarna pucat kekuningan dan rapuh, serta tampak benda inklusi intranuklear pada hepatosit. *Inclusion Body Hepatitis* disebabkan oleh infeksi virus Adenovirus Grup 1 spesies Fowl Adenovirus (FAdV). Penelitian ini bertujuan untuk melihat lesi makroskopis dan mikroskopis ayam broiler yang diinfeksi buatan dengan gerusan hepar ayam terdiagnosa IBH.

Sampel yang digunakan yaitu hepar ayam yang telah dikonfirmasi positif IBH dengan *polymerase chain reaction* (PCR). Sampel hepar dibuat menjadi suspensi dan diinfeksi ke tiga ekor ayam broiler berusia 3 minggu secara peroral masing-masing sebanyak 0,5 ml. Ayam broiler dinekropsi pada hari ke 10 dan 14 pasca inokulasi. Lesi makroskopis yang timbul diamati kemudian sampel dari setiap organ diambil dan disimpan dalam formalin 10% untuk dibuat preparat histopatologi. Sampel ginjal dan hepar kemudian diuji PCR untuk melakukan identifikasi virus.

Gejala klinis yang muncul adalah ayam tampak pucat, lemah, bulu tidak teratur, dan pertumbuhan tubuh yang lambat. Lesi makroskopis yang teramati berupa *hydropericardium*, kebengkakan dan nekrosis ginjal, dan hemoragi petekial pada otot skelet. Lesi mikroskopis yang teramati berupa hiperplasia duktus biliferus, perikarditis, nekrosis tubulus ginjal, serta infiltrasi sel-sel limfosit pada hepar dan ginjal. Identifikasi virus menggunakan uji PCR menunjukkan hasil negatif. Berdasarkan lesi makroskopis dan lesi mikroskopis yang muncul serta hasil uji PCR dapat disimpulkan bahwa didapatkan hasil negatif untuk keberadaan virus FAdV penyebab IBH.

**Kata Kunci:** Adenovirus, Duktus biliferus, Hiperplasia, *Hydropericardium*, *Inclusion Body Hepatitis*, Nekrosis Ginjal, PCR, Perikarditis

## **ABSTRACT**

### **MACROSCOPIC AND MICROSCOPIC VIEW OF BROILER CHICKEN'S ORGANS THAT EXPERIMENTALLY INFECTED BY INCLUSION BODY HEPATITIS VIRUS**

**Lisa Inamer Hidayati**  
**14/364659/KH/8090**

Inclusion Body Hepatitis (IBH) is a disease that affected broiler chicken aged three to seven weeks old. This disease causes lack of chicken growth, hepatomegaly, fragile pale yellowish liver, and intranuclear inclusion body in hepatocytes. Inclusion Body Hepatitis caused by Group 1 Adenovirus species Fowl Adenovirus (FAdV) infection. This research aims to see macroscopic and microscopic lesions of broiler chicken that were infected by chicken liver suspension diagnosed with IBH.

The sample used was a chicken liver with positive result of IBH after tested using polymerase chain reaction (PCR). The sample of liver was made into a suspension, and been infected perorally into three 3-week-old broiler chickens, 0,5 ml each chicken. Necropsy were performed on day 10 and 14 post inoculation. The resulting macroscopic lesions were observed, then the samples of each organ were taken and srored in 10% formalin to make histopatologic preparation. Liver and kidney samples were tested using PCR for virus identification.

The clinical signs that appear were pale, weak, irregular feathers, and slow body growht of the chickens. Macroscopic lesions that observed were hydropericardium, swollen and necrosis of kidney, and petechial haemorrhage on skeletal muscle. Microscopic lesions that observed were bile duct hyperplasia, pericarditis, renal tubular necrosis, and lymphocyte cells infiltration on liver and kidney. Virus identification using PCR assay gave a negative result. Based on macroscopic and microscopic lesions observed, also identification using PCR result, it can be concluded that the result for FAdV is negative.

**Key Words:** Adenovirus, Bile duct, Hyperplasia, Hydropericardium, Inclusion Body Hepatitis, Kidney necrosis, PCR, Pericarditis