ABSTRACT

KENYO PALUPI. Effect of Corticosteroid on Limfoid Organ of Broiler. Under direction of SRI ESTUNINGSIH and WIWIN WINARSIH.

Corticosteroid is an anti-inflammatory agent which have been used for poultry industry widely. The aim of this research was to study the effect of corticosteroid on lymphoid organ of broiler by histopathological analysis. Thirty commercial DOC (Day Old Chick) were divided into 2 groups. First group was control and second group was treated by corticosteroid (3 mg/Kg) orally. Each group was divided into 5 subgroups according to their sacrifice day at age from 2 week until 6 week. This treatment done for 6 weeks, broilers then were necropsied. The bursa of Fabricius, thymus, and spleen were collected as histopathological samples. Samples were processed routinely to prepared histopathology slide stained with Haematoxylin Eosin. The parameters observed include to measured the number of lymphoid follicle of bursa Fabricius and spleen, the number of Lymphocyte of bursa, thymus and spleen, and width of bursa’s plica and cortex and medulla of thymus. Quantitative data were analyzed with T-student test. The observation results was corticosteroid caused immunossupression that showed by decrease of Lymphocyte and lymphoid follicle numbers which are significant (p<0.05) compared to the control group. There were significant (p<0.05) compare to the control group on the number of small and large lymphoid follicles, high and wide of plica of bursa of Fabricius, width of medulla of thymus, and the number of lymphoid follicles of spleen.

Keywords: corticosteroid, lymphoid organ, histopathology