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**THE WEIGHT AND THE HISTOLOGICAL CHANGES WITH AGE  
OF THE BURSA OF FABRICIUS IN CHICKENS**

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(Summary of Masters thesis written under direction of Dr. N. KUDO)

The purpose of the study was to determine the weight and the histological changes with age as precise as possible. The one hundred and thirty eight male White Leghorn chickens used in this investigation were 27 weeks of age from the day of hatching.

1) The mean weight of the bursa of Fabricius was 0.04 g on the day of hatching and it increased constantly until 10 weeks of age. The bursa attained the maximum mean weight of 4.25 g at 10 weeks of age. Bursal mean weight decreased, apparently, from 12 weeks of age. All bursal weights were below 0.3 g at 27 weeks of age.

2) The bursae of Fabricius were divided into 6 types based upon their histological figures. Type I; Medulla partially enveloped with cortex. Type II; Medulla completely enveloped with cortex and follicles gradually enlarged. Type III; Follicles enlarged still more with a waved basement membrane. Type IV; Subepithelial connective tissue proliferated over all portions. Type V; Accretion of plicae from the basal portion. Cysts and regressive changes (Reduction of lymphocytes derived from the follicles and fatty degeneration) in the follicles were recognized with advancement of accretions. Type VI; All of the follicles lost their normal structures due to cysts and regressive changes. At the same time, the bursae of Fabricius became fibrous.

3) The conclusion was obtained from the relationship between the bursal growth and the frequency of above mentioned 6 bursal types. Types I and II are early stages of growth, type III the middle and last stage of growth, type IV the early stage of involution, type V the middle stage of involution and type VI the last stage of involution.