CROSS-REACTIVITY OF CHICKEN SERUM VACCINATED WITH AVIAN INFLUENZA VIRUS H5N1 CLADE 2.3.2 AND CLADE 2.1.3 USING HEMAGGLUTINATION INHIBITION TEST (HI Test)

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ABSTRACT

The aim of this study was to determine cross-reactivity between Avian Influenza H5N1 virus clade 2.3.2 post-vaccination chicken serum with clade 2.1.3 antigen and Avian Influenza H5N1 virus clade 2.1.3 post-vaccination chicken serum with clade 2.3.2 antigen using HI test. Test-serum was obtained from total 45 chikens, 15 chickens was vaccinated with Avian Influenza H5N1 virus clade 2.3.2 killed-vaccine, 15 chickens was vaccinated with Avian Influenza H5N1 virus clade 2.1.3 killed-vaccine and 15 chikens used as controls without vaccination. After getting test-serum, HI test was performed by using AI H5N1 antigen clade 2.1.3 and AI H5N1 antigen clade 2.3.2 for all sera from each group. The HI-titer was calculated and analysis by ANOVA. The results of HI test showed cross-reactivity between post-vaccination chicken serum Avian Influenza H5N1 virus clade 2.3.2 with clade 2.1.3 antigen occurs with low antibody titers and cross-reactivity chicken serum post-vaccination Avian Influenza H5N1 virus clade 2.1.3 with clade 2.3.2 antigen occurs with high antibody titers.

Key Word: Avian Influenza, Cross-reactivity, Clade 2.1.3, Clade 2.3.2, HI Test