



EVALUATION OF DIFFERENT VACCINATION PROGRAMS FOR ND, AI AND IBD VIRUSES IN BROILER CHICKENS

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ABSTRACT

In the present study we try to evaluate of Newcastle Disease (ND), Avian Influenza (AI) and Infectious Bursal Disease (IBD) antibody levels after different vaccination programs was conducted on broiler chickens distributed in four farms in Kaluobia governorate using Haemagglutination Inhibition test for ND and AI and ELISA test for IBD. In addition, we try to modify a vaccination program, to compare our program with the field programs. The present study it was concluded as following : 1-Using of lentogenic NDV live vaccines in day old chicks by aerosol followed by a booster dose of Clone-30 at 12 days of age in drinking water produce higher HI antibody titers than vaccination with HB1 followed by La Sota alone with 10 days interval in between. 2- Vaccination with ND inactivated vaccine proceeded or followed by vaccination with lentogenic ND vaccine produce higher HI antibody titers than uses of live vaccine alone. 3-Vaccination of AI (H5N2) killed vaccine at 11 days of age produce good HI antibody titers in maternally immune chicks. 4-Farms and experimental birds vaccinated with two doses of IBD vaccine (Intermediate and Intermediate plus strains) produce higher immune response than that received one dose of Intermediate vaccine classical strain

KEY WORDS: Vaccination, Evaluation, ND, AI, IBD.

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1- INTRODUCTION

Broiler farms in Egypt are attacked by many of viral diseases most of them became endemic disease .Newcastle disease, Avian Influenza and Infectious Bursal disease viruses cause many economic losses and deaths in broiler farms. Newcastle disease (ND) is a major constraint to village poultry production throughout the developing countries, frequency causing mortality rates of 75% to 100% in unvaccinated flocks [1].The disease causes great losses in most scavenger and commercial flocks [2].Recently, the highly infectious ND is reported to have almost reached 100% mortality in some African countries [3] . Avian Influenza become the most disaster threat to the poultry industry all over the world after the occurrence of highly

pathogenic AIV (HPAI) outbreak in many parts of the world [4]. The first record of HPAI H5N1 in Africa was reported in Nigeria in early 2006 [5] and subsequently in Egypt in 17 February 2006 [6].Vaccination could be a useful tool in controlling AI outbreaks. However, a carefully conceived vaccination strategy must be accompanied by strict biosecurity measures and efficient monitoring systems. Extensive vaccination programs are currently ongoing in South East Asia and Egypt to control the H5N1HPAI epidemics [7].Vaccination does not confer complete sterilizing immunity and some vaccinated birds may continue to be infected and hence be contagious. If not monitored properly, the virus can circulate silently within a vaccinated flock [8]. Reverse genetically H5N1 Chinese strain (A/goose/ Guangdong /1/1996) and H5N2 low pathogenic killed