[Session I] #1

Biological Characteristics and Pathogenesis in Chickens of Infectious Bursal Disease (IBD) Virus Isolated in North Vietnam

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We isolated some strains of infectious bursal disease (IBD) virus in North Vietnam and researched the virus growth characteristics, the virulence and molecular weights of them. The chicken embryos were the suitable media for the replication of IBD virus and the best route of inoculation was CAM (chorioallantoic membrane). A 100% embryo showed the lesions and the 55% embryos died during 48 - 96 hours. After 13 serial passages in chicken embryo fibroblast cells, the IBD virus had typical cytopathogenic effect. The virulence of G-HT strain isolated in Ha Tay Province demonstrated EID_{50} = $10^{-7\,50}$/ 0.2 ml; ELD_{50} = $10^{-5\,15}$/ 0.2 ml; CID_{50} = $10^{-5\,37}$/0.4ml; CLD_{50} = $10^{-3\,8}$/0.4 ml and was equivalent to that of virulent strain 52/70. The clinical signs, gross and histopathological findings of the chickens infected with the G-HT strain were similar to those of the chickens infected with the virulent 52/70 strain. The structure of the isolates under the electron microscope was consisting of the 6 side regular polygonal shape with a diameter varying about 56nm by x300,000 magnifications. These suggested that the G-HT strain isolated in Vietnam was virulent and could cause typical Gumboro disease in chickens.

Abbreviation: Chicken infective dose fifty percent (CID_{50}) Chicken lethal dose fifty percent (CLD_{50}) Egg infective Dose fifty percent (EID_{50}); Egg lethal dose fifty percent (ELD_{50})

[Session I] #2

Ultrastructural Observation of Pleomorphic Cells in Actinobacillus Pleuropneumonia of Pigs

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Actinobacillus pleuropneumonia (App) is a very important disease in hog farm. In Taiwan, the first report was presented on 1975, it is still very common till now. In the lesions of this disease, typical pleuropneumonia was always diagnosed, above all, a special so-called pleomorphic cells(PMC) were revealed in most cases, which could be act as a diagnostic criterion. Although, there were many papers mentioned the morphology of these cells, however, the cell···s characteristics or the origin is still disputed. In this study, eight specific pathogens free pigs were inoculated intratracheally with App at a concentration of 5×10^{6} CFU, then, each two