

Abstract

There have been several human cases infected avian influenza virus in Hong Kong, China, Netherlands, Vietnam and Thailand since 1997, and some of them were fatal cases. The fact implies that avian influenza virus is the most potential pathogen, which maybe cause a "pandemic" in the world. This study was implemented to know whether the native high-risk group had been infected the avian influenza virus. We collected and examined 254 serum samples from the poultry farm workers and culling workers. Neutralization assay was conducted to detect the antibody against avian influenza virus, the virus strains we used including A/Duck/Tainan/A45/03(H7N7), A/Duck/Taipei/A30/02(H5N2) and A/Chicken/Changhua/1209/03(H5N2). All of the test results were negative, so we did not find the poultry workers who had any antibody against the above three virus strains. This study demonstrated that there was no avian-to-human flu transmission occurred in Taiwan. However, the human H5N1 cases in Thailand tell us that cross-species transmission of avian influenza has to be noticed seriously. Surveillance and preparedness for the novel influenza are essential to interrupt cross-species transmission of avian influenza.

Keywords : avian flu ; swine flu ; sero-epidemiology ; influenza virus A ; micro-neutralization