Serologic survey of high-risk group in the early phase of Influenza a(H7N9) virus circulation in guangdong province

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To assess the extent of a novel influenza A(H7N9) virus transmission and latent infection of high risk population in the early stage of circulation in Guangdong Province, we conducted sero-epidemiologic studies among close contacts exposed to the first H7N9 case and suspicious exposures to the first H7N9 infected poultry and the earliest external environmental contaminated with H7N9 virus in Guangdong Province located in the southern part of China. 3 different kinds of inactivated H7N9 virus isolated from human, poultry and external environment which are the key host of avian influenza virus circulation was as the antigen to detect the antibody of the blood specimens collected from the 561 serum from close contacts and suspicious exposure by modified horse red-blood-cell hemagglutinin inhibition. None of the 561 samples whose HAI titers was 20 or more and no person in 561 high risk crowd produced the antibody to H7N9 isolated from different origin. Our findings suggest that in the early phase of circulation and evolution of the novel H7N9 virus in Guangdong Province, the antigenic activity of H7N9 virus do not change when it experience different host, the transmission capacity of cross-species of H7N9 is very limited and the latent infection rate is very low.

Biography

Jie Wu completed her MD. and Ph.D. from Academy of Military Medical Sciences, Beijing, China and postdoctoral studies from Hong Kong University of Science and Technology. Dr. Jie Wu have done molecular biology of medicine and virology for many years. In recent years, Dr. Jie Wu mainly study the diagnosis and detection of influenza virus of IILI, the serological test and drug resistant analysis of seasonal influenza virus, the character of circulation and evolution of avian influenza virus and the antibody screening and epitope analysis of H5N1 strain.

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