Abstract

In order to strengthen the monitoring and control procedures of the newly emerging and reemerging infectious diseases, Center for Disease Control Taiwan (CDC-Taiwan) started a Syndrome Surveillance Reporting Program in July 2000. As the SARS outbreak is the first emerging infectious disease in the twenty-first century, it would be a great chance for us to evaluate the newly set-up surveillance program and to assess the suitability of specimens stored in the past for the purpose of future testing uses of emerging infectious diseases.

The objective of the project is to find out whether there were any SARS or avian influenza A (H5 subtype) cases that occurred in the period between January and March 2003, just before the first SARS case officially confirmed and announced by CDC-Taiwan. The specimens were originally stored as cases of acute respiratory syndrome and employed for finding both the genome and antibodies of SARS coronaviruses or avian influenza A (H5 subtype) viruses.

In the targeted time period, there were a total of 37 reported acute respiratory syndrome cases. Among them only 14 cases (38%) provided suitable specimens for testing. On top of those, they are all serum samples suitable for serological tests only. Nevertheless, none of the 14 cases tested were positive in SARS coronavirus infection verification by an ELISA IgGAM test. As the serological test procedure for avian influenza A (H5 subtype) has not been setup yet, there are no data available so far.

Besides, there are three cases having stayed in the Mainland China before they became sick. Among them, only one case had suitable serum specimen in our collection, which was confirmed to be not a SARS case. The other two cases without proper specimens left in our inventory, though, were both disqualified and thrown out as a false alarm after the preliminary and secondary checks by some clinical specialists.

Most of the specimens stored by us for the future are serum samples suitable for serological or certain genomic tests for detecting and identifying infectious agents with potentials of causing viremia or bacteremia only.

Keywords：acute respiratory syndrome；SARS-CoV；avian influenza virus；retrospective detection