

Case report of the Middle East Respiratory Syndrome coronavirus (MERS-CoV) infection in healthy male

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Middle East Respiratory Syndrome (MERS) was first described in Saudi Arabia in 2012. Since May 2015, the largest outbreak of MERS except Middle East countries has been occurred in South Korea and raises major concern of public health. We introduce the case of 35-years-old healthy male who was infected by MERS-CoV when he visited to his mother in a general ward of the hospital in Pyeongtaek-si. The patient had fever, cough, sputum and diarrhea with lobar pneumonia and severe hepatitis. Ribavirin and pegylated interferon alpha-2a were administered with supportive care and patient discharged after 25 days of hospital admission without any sequelae. The case showed that even a patient without underlying disease may be infected by MERS-CoV. Furthermore, development of strategy for the public health preparedness against MERS will be necessary.

The first co-infection of scrub typhus and SFTS

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As ticks are excellent vectors for disease transmission, tick-borne diseases are common. And, a single tick bite can transmit multiple pathogens. Accordingly, it leads to atypical presentations of some classic tick-borne diseases, such as high fever, myalgia, arthralgia, and gastrointestinal symptoms. When tick-bite history is evident, scrub typhus is the first disease for differential diagnosis in Korea due to its high prevalence rate. Beside the scrub typhus, Severe fever with Thrombocytopenia Syndrome (SFTS) is also needed to be considered in Korea. SFTS is an emerging infectious disease caused by a novel tick-borne Phlebovirus of Bunyaviridae, first identified in China in 2010. In South Korea, the first patient was identified in May, 2013 and after then, 36 patients with SFTS were found and 17 of them were fatal cases. The clinical symptoms of SFTS are high fever, vomiting, diarrhea, thrombocytopenia, leukopenia and multiple organ failure and disseminated intravascular coagulation, resulting in death 7-14 days after the onset of the illness. We report the case of a 78-year-old woman who had sudden onset fever 5 days before her admission. Her condition did not improve after antibiotic treatment and she was transferred to Gil hospital. She had 2 scab formed wounds on the anterior neck area and on the abdomen. Tick-borne disease was suspected and her sera were tested for SFTSV and O. tsutsugamushi Ab. Co-infection of scrub typhus (positive 1: 5120) and SFTS was diagnosed. Her condition improved with doxycycline treatment with supportive care. This is the first case report of co-infection of scrub typhus and SFTS. As some of the tick-borne diseases have affirmative treatment choice such as doxycycline for scrub typhus, anaplasmosis and Ehrlichiosis, in patient with tick bite, co-infection of tick-borne diseases should be considered and all treatment options should be taken into account without delay.