

Sar and uti and serodiagnosis

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SARS, UTI, and Serodiagnosis Etiological Agent of SARS The etiological agent of SARS is novel coronavirus that was found in Hong Kong, Germany and United States laboratories (Chp. gov. hk, 2015). The agent was found through cell culture, electron microscopy and establishment of specific genomic sequences initiated by Polymerase Chain reaction. The discovery of SARS was surprising because the coronavirus had not been seen before in either humans or animals. The announcement of the surprising discovery was made by World Health Organization based on the evidence produced by thirteen laboratories from the ten participating countries in the lab investigation.

Preventive and Curative Methods for Treating SARS

SARS is prevented by maintain a high personal hygiene such washing hands before handling any food item or eating. Hands should be washed after touching public equipment such as elevators and handrails by way of running water. An environment with good ventilation, proper pest infestation prevention, and healthy lifestyle can be used to prevent SARS. The disease is cured through administration of antibiotics for treating pneumonia. A patient gets antiviral medications and steroids to lessen lung swelling. Blood semen is administered to a patient recovering from the disease (Chp. gov. hk, 2015).

Precautionary Measures in United States for Preventing SARS Epidemic

The outbreak of SARS in 2003 saw researchers and scientists in Center for Disease Control and Prevention (CDC) work with WHOM. There were no deaths following the outbreak, but eight citizens had laboratory evidence of SARS-CoV infection after traveling to the parts of the world that where the disease had spread. CDC opened Emergency Operations Center to offer <https://assignbuster.com/sar-and-uti-and-serodiagnosis/>

relentless coordination and response. Eight hundred medical staff and additional medical officers, epidemiologists and specialists serviced the center to conduct on-site investigations around the globe. Health alert notices were given to travelers in the event they were exposed to SARS (CDC, 2015).

UTI and Serodiagnosis

Three Ways UTIs May Be Acquired

UTIs may be acquired in the hospital, community and exposure to neurological conditions (Phagetherapycenter. com, 2015). Community-acquired UTIs account for 70% of overall infections and is linked to Escherichia coli from the bowels of the patients. Hospital acquired UTIs are attributed to predisposition to instrument such as surgical urinary catheter. The instruments host Escherichia coli, Pseudomonas, and Staphylococci bacteria and spread them to the patient. Hospital acquired UTIs manifest antibiotic resistance at times due to exposure to multiple organisms. In addition, neurological conditions such multiple sclerosis, spinal cord injury, and spina bifida lead to UTIs.

Importance of Primary and Secondary Antibody Response to an Immunogenic Response

Primary antibody response occurs during the first antigen exposure where the immune system releases specific antibodies in the blood after a multiple day period (Crump, Corder, Henshaw & Reller, 2004). Secondary antibody response boosts immunogenic response when second, and subsequent antigen exposure occurs. The response is stronger and has a shorter lag time than the primary immune response.

Importance of Acute and Convalescent Serum Specimens

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Acute and convalescent serum specimens are collected for antibody serology in order to determine the presence of antibodies following an infection. The collection of acute and convalescent serum specimens for serologic diagnosis of infection differs in amount and period with respect to the infection under scrutiny.

References

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