

Identification of Crimean-Congo Hemorrhagic Fever Virus in Patients Referred to Ahvaz and Gilan Hospitals in Iran by real-time PCR Technique

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Abstract : Crimean-Congo hemorrhagic fever (CCHF) is an acute hemorrhagic disease. This disease is one of the common diseases between humans and animals, transmitted through tick bites or contact with the blood and secretions or carcasses of infected animals and humans. CCHF is more common in people who work with livestock, such as ranchers, butchers, farmers, slaughterhouse workers, healthcare workers, etc. Its hospital prevalence is also very high. Considering that CCHF can be transmitted through the consumption of food such as beef and sheep meat, this study aims to quickly identify and diagnose the Crimean-Congo fever virus in suspected patients through real-time PCR technique. In the summer of 1402, 20 blood samples were collected separately from Ahvaz and Gilan hospitals. An extraction kit was used to extract the virus RNA. Primers and probes were designed based on the S genomic region, the conserved region in CCHFV. Then, a real-time PCR technique was performed with specific primers and probes. It should be noted that the mentioned technique was repeated several times. The number of 4 samples from the examined samples was determined positive by real-time PCR. This technique has high sensitivity and specificity and the possibility of rapid detection of CCHFV. Therefore, the above method is a good candidate for quick disease diagnosis. By diagnosing the disease, the treatment process can be done faster, and the best prevention methods can be used to control the disease and prevent the death of patients.

Keywords : ahvaz, crimean-congo hemorrhagic fever, gilan, real time PCR

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