Turkish Journal of Medical Sciences

Turkish Journal

of

Medical Sciences





medsci@tubitak.gov.tr

Scientific Journals Home Page

Epidemiological risk factors for Crimean-Congo hemorrhagic fever patients

Ayten KADANALI Serpil EROL Zülal ÖZKURT Kemalettin ÖZDEN

Department of Clinical Bacteriology and Infectious Diseases, Faculty of Medicine, Atatürk University, Erzurum - TURKEY

Abstract: Aim The aim of this study was to evaluate the epidemiological risk factors for Crimean-Congo hemorrhagic fever (CCHF) patients admitted to our hospitals between January 2004- December 2006. Materials and methods: This was a study of 63 CCHF patients whose definitive diagnosis was based on the detection of CCHF virus-specific IgM by ELISA and/or of genomic segments of the CCHF virus by real time polymerase chain reaction (RT-PCR) and 50 healthy controls. Related data were collected prospectively. Results: Twenty-two (50.8%) of the patients were female, and 31 of them (49.2%) were male. The mean age of the patients was 46 years. Anti-CCHF virus IgM was positive in 52 patients, and RT-PCR was positive in 13 patients. Thirty two patients (50.8%) had a tick-bite history before the onset of fever. Fifty-nine (93.6%) patients were involved farming/handling livestock, and they were living in rural area. In univariate analysis of epidemiological factors of the patients and healthy controls, farming (P < 0.001), handled livestock (P < 0.001), living in rural area (P < 0.001), and history of tick-bite (P < 0.001) were determined as the risk factors for CCHF in this study. Multivariate logistic regression analysis revealed only farming (OR = 59.9) and tick-bite history (OR = 5.9) as risk factors for CCHF. The disease was observed between April and August (most frequent in July, 2005 and June, 2006). Conclusion: We saw that CCHF appears to be an increasing seasonal problem in our region, and obtaining the epidemiological factors of CCHF is important for determining the prevention strategy.

Key words: Crimean-Congo hemorrhagic virus, epidemiology, risk factors

Turk J Med Sci 2009; **39**(6): 829-832. Full text: <u>pdf</u> Other articles published in the same issue:<u>Turk J Med Sci,vol.39,iss.6</u>.