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Prevalence of Seropositivity for Cytomegalovirus in Patients with Hereditary Bleeding Diseases in West Azerbaijan of Iran

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Abstract : Human cytomegalovirus is a species of the cytomegalovirus family of viruses, which in turn is a member of the viral family known as herpesviridae or herpesviruses. Although they may be found throughout the body, HCMV infections are frequently associated with the salivary glands. HCMV infection is typically unnoticed in healthy people, but can be life-threatening for the immunocompromised such as HIV-infected persons, organ transplant recipients, or newborn infants. After infection, HCMV has an ability to remain latent within the body over long periods. Cytomegalovirus (CMV) causes infection in immunocompromised, hemophilia patients and those who received blood transfusion frequently. This study aimed at determining the prevalence of cytomegalovirus (CMV) antibodies in hemophilia patients. Materials and Methods: A retrospective observational study was carried out in Urmia, North West of Iran. The study population comprised a sample of 50 hemophilic patients born after 1985 and have received blood factors in West Azerbaijan. The exclusion criteria include: drug abusing, high risk sexual contacts, vertical transmission of mother to fetus and suspicious needling. All samples were evaluated with the method of ELISA, with a certain kind of kit and by a certain laboratory. Results: Fifty hemophiliacs from 250 patients registered with Urmia Hemophilia Society were enrolled in the study including 43 (86%) male, and 7 (14%) female. The mean age of patients was 10.3 years, range 3 to 25 years. None of patients had risk factors mentioned above. Among our studied population, 34(68%) had hemophilia A, 1 (2%) hemophilia B, 8 (16%) VWF, 3(6%) factor VII deficiency, 1 (2%) factor V deficiency, 1 (2%) factor X deficiency, 1 (2%). Sera of 50 Hemodialysis patients were investigated for CMV-specific immunoglobulin G (IgG) and IgM. % 91.89 patients were anti-CMV IgG positive and %40.54 was seropositive for anti-CMV IgM. 37.8% patient had serological evidence of reactivation and 2.7% of patients had the primary infection. Discussion: There was no relationship between the antibody titer and: drug abusing, high risk sexual contacts, vertical transmission of mother to fetus and suspicious needling.

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