

Human Parvovirus B19 Infection in Rheumatoid Arthritis Patients: Screening and Clinical Significance

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Rheumatoid arthritis (RA) is a common chronic inflammatory disease, affecting about 1% of the general population. Conflicting data are available regarding the etiologic association of human parvovirus B19 (B19) infection with RA. This study aimed to determine the prevalence of B19 infection in patients with RA compared to healthy controls and to assess its possible association with disease activity or severity. The study included 40 RA patients and 40 age and sex matched apparently healthy controls. Detection of B19 DNA by nested PCR and the detection of anti-B19 IgM and IgG by ELISA) were performed for patients and controls. It was found that B19 infection is more prevalent in patients with RA than healthy controls as the frequency of detection of B19 DNA and anti-B19 IgG was significantly higher in RA patients than healthy controls ($P=0.003$ and $P=0.04$, respectively) but not IgM. It was concluded that B19 infection may have a role in the etiopathogenesis of RA but not involved in disease activity or severity.