Pathogenicity and diagnostic methods of human cytomegalovirus

ABSTRACT

HUMAN CYTOMEGALOVIRUS (HCMV) IS A BETA-HERPESVIRUS CAPABLE OF ESTABLISHING LIFELONG INFECTION IN HUMANS. It is primarily transmitted through bodily fluids like blood, urine, and saliva. In healthy individuals, primary HCMV infections are often asymptomatic but can lead to persistent or latent infections. However, immunocompromised individuals such as organ transplant recipients and those with acquired immunodeficiency syndrome, are at risk of severe and potentially fatal illnesses resulting from HCMV pathogenicity. Consequently, it is crucial to gain a comprehensive understanding of HCMV's pathogenicity and diagnostic methods, particularly for detecting the presence of HCMV in individuals with compromised immune systems. This review aims to address these aspects and provide insights to assist relevant authorities in designing effective interventions and managing HCMV-related illnesses..