INTRODUCTION

Human Cytomegalovirus (CMV) is a ubiquitous agent belonging to the Herpesvirus group. Like other members of the Herpesvirus group, CMV possesses the cardinal characteristics of latency-reactivation and potential oncogenicity ***(Nitche et al., 2000)***.

CMV infection is prevalent throughout the world. Most infections are asymptomatic. Clinically apparent CMV infections constitute a small proportion of infected individuals ***(Fahle and Fischer, 2000)***.

Clinical manifestations of CMV infection vary with the age of acquisition of the virus and range from mild and self-limited to severe and fatal disease. The major clinical syndromes are cytomegalic inclusion disease in neonates, heterophil-negative mononucleosis in previously healthy individuals, and interstitial pneumonia in immunocompromised hosts ***(Demmler et al., 2000).***

CMV infection is the most common congenital infection, affecting 0.4% to 2.3% neoborns. Most of them are asymptomatic at birth but later 10% develop handcaps, mainly neurological disturbances ***(Santos et al., 2000).***

The awareness of the significance of CMV infection in individual patient care, as well as in public health, has steadily increased since the isolation of CMV in the 1950s.

Humans are believed to be the only reservoir for human CMV strains. However, an understanding of the epidemiology of this virus, particularly its transmission, is complicated by the myriad of possible exposure sources. Acquisition of CMV appears to require close or intimate contact with persons who are excreting CMV in their urine, saliva, semen, tears, or other secretions ***(Pamphilon et al., 1999).***

Studies have shown that infants and children can acquire CMV from other children, from their mothers in utero, at birth or during the perinatal period ***(Blok et al., 1999).***

Stagno et al., (1989) reported that perinatal or postnatal CMV transmission in term infants occurs during exposure to genital secretions at birth or through breast milk. There is considerable evidence that shedding of CMV into breast milk is the main source of CMV infections in early life ***(Stagno and Cloud, 1994).***

Nosocomial infections are infections that develop within a hospital, or are produced by microorganisms acquired during hospitalization. Nosocomial infections predominantly affect patients, but can also involve health-care workers and visitors to the hospital. Health-care workers may be at risk of infection from patients and pathological specimens and have a right to expect reasonable protection from these hazards ***(Emmerson et al., 1996).***

Neoborns infected with CMV in Neonatal Intensive Care Unites (NICUs) constitute a real danger on personnel working in these units especially women, in their child bearing years, who may exposed daily to patients excreting CMV, and this primary CMV infection (acquired

during pregnancy) may be devastating to the fetus ***(Sobaszek et al., 2000).***

Polymerase Chain Reaction (PCR) has become an invaluble diagnostic tool in diagnosis of CMV infection with best sensitivity and 100% specificity ***(Liesnard et al., 2000).***

A thorough understanding of the viral epidemiology is a prerequisite if CMV infection is to be prevented. A major gaps exist in understanding how the virus is acquired. Despite the numerous unanswered questions, major advances have still been made in understanding both CMV transmission and disease prevension.