ISSN : 2466-0744

MULTIDISCIPLINE PROCEEDINGS OF

DIGITAL FASHION CONFERENCE

KOREA, REPUBLIC OF

Multidiscipline Proceedings of

DIGITAL FASHION CONFERENCE

October 2022 *(Volume 2, No.5)*

Available at digitalfashionsociety.org
Published:
서울 합정역
파주출판도시
ISSN 2466-0744
Seoul
Korea, Rebuplic of

EDITORIAL BOARD

EPIDEMIOLOGICAL FEATURES OF OPPORTUNISTIC VIRAL INFECTIONS AFTER ORTHOTOPIC LIVER TRANSPLANTATION.

Abdurakhimova D.R., Kasimova R.I., Zhuraev R.H., Kan N.G.
Research Institute of Virology of the Republican Specialized Scientific and Practical Medical Center of Epidemiology, Microbiology of Infectious and Parasitic Diseases
Tashkent, Republic of Uzbekistan

Opportunistic viral infections are common in liver transplant recipients. We know that there is a risk of infection with cytomegalovirus (CMV) and herpes simplex viruses-1 and 2 (HSV-1 and 2), Epstein-Barr virus (EBV) reactivation of infection and recurrence of infection. Of the above infections, cytomegalovirus (CMV) is one of the most common and serious opportunistic infections in patients with solid organ transplantation. In different series, the incidence of CMV infection ranges from 25% to 85%. The indirect effect of infection includes a decrease in the long-term survival of the patient and the allograft. The advantages of cytomegalovirus (CMV) prevention in preventing the direct consequences of CMV infection and disease are well known; however, the effect of exposure to antiviral agents on preventing the indirect consequences of CMV infection is poorly defined.

Keywords: opportunistic viral infections, liver transplantation, cytomegalovirus, Epstein-Barr virus, herpes simplex virus.

Conrad Rauber , Katja Bartelheimer et al., in their studies evaluated the prevalence and ratio of herpes viruses in bile, blood and liver tissue and studied their relationship with complications of the biliary tract and survival without repeated transplantation after LT. The median of their observations was 48 months, during which a total of 16 patients underwent repeated TP and 11 patients died. Of the patients, 46.5% received valganciclovir prophylaxis during bile sampling. Cytomegalovirus (CMV) (18.3%), human herpes virus 6 (HHV-6) (34.2%), human herpes virus 7 (HHV-7) (20.5%) and Epstein-Barr virus (EBV) (16.4%) were widespread in bile after LT, while herpes simplex virus 1 and 2 (HSV-1, HSV-2), and human herpes virus 8 (HHV-8) were not detected or were rarely detected in bile. Joy Varghese, S. Subramanian et al., presented data in which before transplantation for IgG and IgM for CMV (and donor), HSV-1 and -2, were available to 153 recipients. All recipients received prophylaxis with ganciclovir or valganciclovir for three months after TP.Of the 153 LT recipients, 131 were men (85%). The median age of LT was 46 yr (range 9 months-71 yr). Overall exposure to CMV was 71.8 per cent followed by EB VCA (61.4%) and VZV (49.6%). Susceptibility to both HSV-1 and -2 was high across all decades ($P<0.001$). Seropositivity of CMV in donor was 90.9 per cent (100 out of 110). Post-transplant CMV qRT- PCR was positive in 17 (26.6%; 3 in recipient negative) of 64 samples tested.qRT-PCR assay was positive in one out of four (25%) tested for HSV-1 and nine out of 19 (47.4%) tested for EBV.Two recipients tested for HSV-2 and one for VZV were negative.There were three deaths in recipients (D+ R+) who were also positive for CMV qRT PCR. There was one death due to HSV-1 pneumonia. One patient with EBV reactivation developed post-transplant lymphoproliferative disorder two years after transplant. In a study conducted by L. Hoppe, S. A. Marroni et al., in 154 patients who underwent 163 orthotopic liver transplants in which CMV infection was detected with positive antigenemia, CMV infection occurred in 65.8% of patients after orthotopic liver

transplantation. Their 5-year survival rate was 85%, while there were no differences between patients with or without infection (P = .8).

Transplant recipients had the highest risk of HSV-1 infection and -2 more for HSV-2. CMV exposure in transplant recipients and donors was very high and was at the greatest risk of recipient reactivation. Despite this, mortality associated with CMV reactivation was low and CMV infection did not affect the survival of patients after orthotopic liver transplantation.