

## VIROLOGY

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## Human herpesvirus type 8 (HHV-8/ KSHV) in patients with decompensated cirrhosis

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Departments of Clinical Pathology and Anatomic Pathology, Buddhist Dalin Tzu Chi General Hospital, Taiwan and Departments of Pathology and Laboratory Medicine, Tzu Chi University, Taiwan  $T^{\rm o}$  date, human herpesvirus type 8 (HHV-8; Kaposi's sarcoma-associated herpesvirus, KSHV) DNA has been consistently found in all types of Kaposi sarcomas. These neoplasms sometimes develop in patients without AIDS with variable immunologic abnormalities after corticosteroid, cytotoxic, or immunosuppressive therapy for malignancies, tissue transplants, or autoimmune diseases. Immunologic disturbances with impairment of immune function associated with spontaneous bacterial peritonitis and a higher incidence of lymphoproliferative disorders and other malignancies have been described in patients with cirrhosis. However, the prevalence of HHV-8 infection in patients with cirrhosis has not been previously described.

Our study found that significantly more patients with decompensated cirrhosis are seropositive for HHV-8 antibodies than healthy controls (P = 0.0018). Antibody titers in the cirrhotic patients are also significantly higher than those in the controls (P=0.0006). Male patients seropositive for HHV-8 antibody are significantly younger than seropositive female patients (P =0.0039). The seropositive rate for HHV-8 antibody seems to be increased with cirrhosis severity. The seropositive rate in cirrhotic patients is not associated with thrombocytopenia (P = 0.6860). There are no significant differences in mean lymphocyte, monocyte, or platelet counts between seronegative and seropositive healthy controls and cirrhotic patients. The seropositive rates between cirrhotic patients with and without lymphopenia, monocytosis, or thrombocytopenia are also not statistically different. Both positive rate and titers of antibodies in cirrhotic plasma samples are much greater than in ascites samples (P < 0.0001). All patients with positive ascites are seropositive. More male or Child-Pugh class C than female or class B seropositive patients are positive for ascites. No hepatitis C virus-related ascites are positive for antibody. Neither plasma nor ascites specimens from any subject are positive for HHV-8 DNA. Seropositivity is not associated with clinical manifestations of HHV-8 infection, such as KS, primary effusion lymphoma, or multicentric Castleman disease.

## **Biography**

Cheng-Chuan Su has completed residency training in Anatomic Pathology at the age of 31 years from National Cheng Kung University Hospital and training in Clinical Pathology at the age of 33 years from National Taiwan University Hospital. He is the Medical Director of Department of Clinical Pathology and the Attending Doctor, Department of Anatomic Pathology, Buddhist Dalin Tzu Chi General Hospital, Chiayi and the lecturer of Departments of Laboratory Medicine and Pathology, School of Medicine, Tzu Chi University, Hualien, Taiwan. He has published more than 25 papers in reputed journals.