

中文題目：組織免疫染色於腎移植病人感染侵襲性巨細胞病毒診斷的價值

英文題目：The value of immunohistochemistry diagnosis in invasive cytomegalovirus infection in renal transplantation

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Introduction

Cytomegalovirus (CMV) is a major infectious complication among organ transplant recipients. CMV esophagitis is the second commonest gastrointestinal manifestation of CMV, following colitis. Early recognition is of vital importance to implement appropriate therapy and avoid potentially fatal complications. Here, we reported a case of CMV esophagitis with negative viral load testing but confirmed by immunohistochemistry result.

Case Report

A 56-year-old woman with end-stage renal disease status post kidney transplantation in 2001 presented with passage of tarry stool and acute kidney injury. Esophagogastroduodenoscopy revealed multiple esophageal, gastric, and duodenal ulcer. PPI (Proton pump inhibitor) and desmopressin were administered for hemostasis. However, clinical symptom improved but lab study disclosed progressive renal failure. Immunohistochemistry of esophagogastroduodenoscopy biopsy confirmed cytomegalovirus infection. Ganciclovir was prescribed as antiviral treatment. Immunosuppressive medications with Tacrolimus and MMF (Mycophenolate mofetil) were tapered down for active infection status. Serology survey showed negative CMV IgM and pp65 antigenemia. Further, she received temporal hemodialysis for elevated creatinine level and decreased urine amount. New-onset low-grade fever developed later and broad-spectrum antibiotic was given for right lower lung hospital-acquired pneumonia. After above managements, creatinine level improved and left forearm arteriovenous fistula was created for regular hemodialysis. She was then discharged with out-patient department follow-up.

Discussion

Serology has no role in the diagnosis of active CMV disease after transplantation. Viral load testing plays the most sensitive role for diagnosis, including pp65 antigenemia assay and PCR (Polymerase chain reaction). However, for tissue invasive disease, especially gastrointestinal or retinal, may has undetectable blood viral loads. Therefore, biopsy with histopathologic examination of tissue is necessary for definitive diagnosis.