中文題目：巨細胞病毒直腸炎在免疫健全個案的表現

英文題目：CMV proctitis in an immunocompetent male

作　　者：胡元瑞[1] 李耿列[2] 林聰蓉[2] 顏慕庸[3]

服務單位：[1]臺北市立聯合醫院仁愛院區一般內科,[2]臺北市立聯合醫院仁愛院區腸胃內科,[3]臺北市立聯合醫院仁愛院區感染科

Introduction: Cytomegalovirus (CMV) infections are common in healthy individuals (In Taiwan, the seroprevalence of CMV is as high as 91.1% in some studies). While CMV remains a major pathogen and causes severe disease to those who are immunocompromised, most of immunocompetent hosts are asymptomatic. However, many case reports have proposed severe tissue invasive CMV infection in immunocompetent individuals, raising the awareness of this phenomenon. Though, many of whom still have comorbidities that would affect immune status. (e.g. diabetes mellitus, chronic kidney disease, pregnancy). We herein present a case with CMV proctitis with tissue approval, symptoms with low grade fever and rectal bleeding, and also a colonoscopy with typical findings.

Case presentation and brief summary: A 30-year-old male, a civil engineer, who had man sex with man (MSM) with unprotected sex for years and no any other systemic disease before, presented with painful defecation with bleeding and diarrhea for more than 2 weeks. He thereby went to colon and rectal surgery outpatient department for assistance, where rectal ulcers with bleeding was found by anoscopy. Colonoscopy was then arranged and showed reddish and swelling mucosa and multiple ulcers. Biopsy was taken in the rectum. The pathology revealed acute and chronic inflammation with ulceration, granulation tissue formation and cytomegalovirus (CMV) infection. Low grade fever, chillness, fatigue, myalgia, abdominal fullness were noted just after biopsy. But he had neither cough, blurred vision, unintentional body weight lost, diarrhea nor relevant TOCC history. HIV and syphilis screened negative at NTU hospital before admission. He was referred to our Infection Disease department for further survey and atypical lymphocyte presented in full blood panel test. He was admitted for 2 weeks intravenous ganciclovir treatment, then oral valganciclovir for 9 days after being discharged. Investigation on possible immunosuppressive status on the patient, including HIV, syphilis, HAV, HBV, HCV were all negative during admission. CMV IgM was positive, indicating a recent infection. The follow-up colonoscopy after treatment of antiviral medications showed dramatic improvement comparing to previous study.

Discussion: Gastrointestinal involvement (mostly colitis) is the most common site of CMV infection in immunocompetent patient, follows by central nervous system and hematological system involvement. Mononucleosis-like syndrome is a common presentation of symptomatic CMV infection in immunocompetent patient. The patient will have low grade fever and atypical lymphocyte (>10%) or lymphocytosis (>50%) on CBC panel, sometimes accompanying with dermatologic findings. Also, hematochezia, rather than abdominal pain or diarrhea acts as the more

common manifestation on immunocompetent patient with CMV colitis/proctitis. The disease could often be misdiagnosed with ischemic colitis, inflammatory bowel disease or even colorectal cancer, and therefore should be considered if unsatisfying outcome follow by initial treatment, such as those who have severe colitis fails to response to steroid or immunosuppressant agent. In addition to symptoms, in order to diagnose CMV colitis/proctitis, presentation of CMV IgM or low avidity of IgG imply a recent infection. Histology findings such as inclusion body remains the mainstay of detection of the disease, but has poor sensitivity, specific IHC stain may help to increase specificity. Blood CMV DNA or biopsy PCR alone is either not sufficient enough to indicate a CMV colitis, for CMV may also act as a bystander. Though intravenous ganciclovir and oral valganciclovir have shown high efficacy over immunocompromised patients, such as AIDS or solid organ transplant recipients, there is currently no available guidelines for CMV-induced tissue invasive disease.
Conclusion: CMV colitis/proctitis in immunocompetent patients differs in manifestation comparing to immunocompromised patients and is hard to be diagnosed contributing to its rarity. The diagnosis should be considered if empirical treatment shows little improvement and relies on clinical findings, symptoms and pathological findings by histological and immunostaining results. The role of antiviral agent is not fully studied and should be assessed case-by-case.