

中文題目：一位慢性腎臟病患之偽膜性腸炎隨後發生或同時合併巨細胞病毒性結腸炎

英文題目：Cytomegalovirus colitis Following or Co-existing with Pseudomembranous Colitis in A Patient with Chronic Kidney Disease

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**Background:** Cytomegalovirus (CMV) colitis was increasingly reported in the patients with Chronic Kidney Disease in recent years. CMV colitis subsequent to or co-existing with *Clostridium difficile* (CD)-associated pseudomembranous colitis was rarely reported. The diagnosis of CMV colitis in the patients with CD colitis may easily be missed.

**Case Report:** The 73 y/o woman of stage 5 chronic kidney disease has lower back pain with radiation to both legs for 3 months. Poor walking ability with intermittent claudication was noticed. L-spinal MRI showed degenerative spondylolisthesis with a bulging disc causing spinal stenosis at L2-3 space. She was admitted to the hospital for scheduled surgery on **June 8**, 2015. BUN was 34 mg/dL and creatinine, 3.78 mg/dL. She underwent laminectomy and disectomy using spinal instrumentation for bone fusion on June 9. Then, urinary tract infection occurred and antibiotic with cefazolin was used. However, she had decreased urine output and progressive deterioration in renal function (BUN, 134 mg/dL; creatinine, 7.79 mg/dL), so she was transferred to Nephrologist's service on **June 17**, where hemodialysis improved urine output later. Antibiotic was changed to cefpirome for suspected sepsis. However, persistent watery diarrhea developed. The stool **CD toxin** assay was positive on **June 23**. At that time, laboratory data included WBC, 33,200/ $\mu$ L; platelet count, 27,000/ $\mu$ L; CRP, 100.2 mg/L; FDP, 39.2 ug/mL; D-D dimer, 9056.8 ng/mL (FEU) and albumin, 2.7 g/dL. However, the oral metronidazole did not improve the symptom and stool CD toxin remained on **June 30** and **July 7**. Thus, oral vancomycin solution was added. Nevertheless, the diarrhea was followed by persistent bloody stool. **On July 10**, the colonoscopy showed anal and rectal ulcers and stool **CMV-PCR** showed positive. She was transferred to ICU due to massive colonic bleeding with shock on **July 16**. Meanwhile, CMV antigenemia was negative. Then, repeated colonoscopy revealed diffuse pseudomembranous colitis from descending colon to rectum, which was confirmed by random mucosal biopsies. The immunohistochemical staining for CMV on the colon biopsies could not find the CMV-infected cells. Oral vancomycin solution and intravenous ganciclovir were given, which stopped bloody diarrhea soon. The stool CD toxin became negative on **July 21**, **27** and **August 4**. The CMV-PCR for stool and blood remained positive on **July 23**. She was transferred to ordinary ward for ganciclovir maintenance therapy on **July 28**. Afterward, general condition gradually improved. On **July 30**, data included WBC, 9,400/ $\mu$ L; platelet count, 81,000/ $\mu$ L; and CRP, 79.8 mg/L. However, she developed toxic epidermal necrolysis involving 95% total body surface area on **August 2**. The CMV-PCR for blood was still positive on **August 4**. She died in severe *Klebsiella* septicemia on **August 12**.

**Conclusion:** We report suspicious CMV colitis following CD colitis in a patient with chronic renal disease. Although CMV was detected in the stool and blood, immunostaining biopsies could not identify the CMV cells. However, the bloody diarrhea resolved soon after ganciclovir therapy. Diagnosis of CMV colitis behind the CD colitis may be difficult and could be easily missed.