

中文題目：結腸導管巨細胞病毒潰瘍性出血在免疫功能正常病人－病例報告

英文題目：Cytomegalovirus associated ulcer bleeding in reconstructed colon conduit at an immunocompetent patient

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Introduction : Cytomegalovirus (CMV) infection is usually asymptomatic in immunocompetent hosts. In immunocompromised or critically ill patients, it can cause life-threatening complication. CMV infection may involve any part of the gastrointestinal tract. Esophagus and colon are the most common locations. CMV infection in colon conduit had not been reported before. Herein, we report a case who developed CMV associated ulcer bleeding in reconstructed colon conduit post total esophagectomy and total gastrectomy.

Case Report : A 60-year-old woman was admitted to medical intensive care unit (MICU) for fever and days-diarrhea induced multi-organ failure. She got esophageal corrosive injury and received total esophagectomy and total gastrectomy with reconstruction by small bowel and colon, respectively about a decade ago. Initial laboratory results were WBC=5.9 $10^3/uL$; Band=20 %; Hb=13.2 g/dL; Platelet=132 $10^3/uL$; GOT=608 U/L; GPT(ALT)=190 U/L; BUN=75 mg/dL; Cre(B)=5.03 mg/dL; Stool culture collected on admission revealed Salmonella spp. After intravenous antibiotics, ventilator support, and temporary hemodialysis, she recovered well. Two weeks after admission, bloody stool developed. High dose PPI and transamine was used. Her bloody stool improved gradually. Upper GI endoscopy showed two major blood clots were noted at colonic conduit and were difficult to be removed. Two weeks later, she began to develop massive bloody stool with remarkable drop of hemoglobin level. Colonoscopy was performed soon. It was completed to 30 cm proximal to anastomosis. Persistently bloody contents purged from proximal part of small bowel was noted, without detection of any definite bleeder. Upper GI endoscopy was performed. After passing larynx, small bowel-like conduit was noted, followed by colon-like conduit. Much blood clots accumulated at colon-like conduit was noted. An exposed vessel with intermittent bleeding was noted and was soon destroyed by heat coagulation. A few ulcers were also noted and biopsies were done. Her gastrointestinal bleeding episode improved after endoscopic hemostasis. Final pathology obtained from ulcer revealed CMV associated ulcer.

Discussion : Small intestine and colon are often used for reconstruction after total esophagectomy and total gastrectomy. Its complication included anastomotic leak, conduit ischemia, dysphagia, delayed gastric emptying, dumping syndrome, diaphragmatic hernia, pneumonia, bronchospasm and atrial fibrillation. CMV colitis is the common etiology of lower GI bleeding in immunocompromised patient. It rarely associated with peptic ulcer disease. Our patient is anatomically an upper GI bleeding, but physically from a lower GI structure. Differential diagnosis for conventional upper GI bleeding at this patient is therefore inadequate. On the other hands, etiologies of lower GI bleeding should be sought and corrected.

In addition to diagnosis, pharmacological treatment for “upper” GI bleeding in this patient is worthy of discussion. High dose proton pump inhibitor is recommended for upper GI bleeding in high risk patients. It is obviously ineffective in patients who received total gastrectomy. Some literatures talked about PPI is helpful to reduce bile reflux and helps relieve symptoms in patient after total gastrectomy. With regard to bleeding situation as that at our patient, it is lack of evidence. From our patient, high dose PPI is ineffective

to control her bleeding and heal ulcer. In immunocompetent patients, symptomatic CMV infections generally self-limited with complete recovery over a period of days to weeks. Antiviral therapy had successful treatment in several immunocompetent cases with severe manifestations of CMV infection. Critically ill patients frequently demonstrate a transient depression in immunity. In our patient, bleeding occur after severe infection (salmonella). Galiatsatos et al. reviewed the literature and found 44 immunocompetent patients with CMV colitis; however, 34 of these patients had comorbidities that would be expected to affect immune function (pregnancy, renal disease, diabetes or malignancy). Rinaldo et al. collected 14 immunocompetent intensive care unit patients presented with CMV colitis. The in-hospital mortality was 71.4% despite specific treatment with ganciclovir. Intensivists should be considered CMV infections if patient presented with gastrointestinal bleeding in spite of a rare condition.

To our knowledge, this is the first case for patient received total esophagectomy and total gastrectomy who developing CMV associated ulcer bleeding in reconstructed colon conduit.