中文題目:成功的醫療治療巨細胞病毒相關性氣腫性胃炎及門靜脈氣體:一病例報告 英文題目:Successful Medical Treatment for Cytomegalovirus-associated Emphysematous gastritis and Portal Venous Gas: A Case Report

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Background: Emphysematous gastitis or gastric pneumatosis associated with portal venous air was rarely reported. The causes may include mucosal defect, ischemic bowel, abdominal surgery, and local or distant infections by gas-forming microorganisms. Association with cytomegalovirus (CMV) was rarely reported.

Case Report: 67 y/o woman of lung cancer post left pneumonectomy, DM and hypertension suffered from cold sweating and general weakness since the morning of July 24, 2014. Hence, she was brought to the hospital, where she was intubated due to acute respiratory failure. As elevated cardiac enzymes (CPK, 2144 IU/L; CK-MB, 287.4 ng/mL and Troponin I, 134.4 ng/mL), acute myocardial infarction was impressed. Cardiac catheterization showed two-vessel coronary artery disease and percutaneous coronary intervention (PCI) was performed. After the procedure, she was admitted to the CCU with use of dopamine and intra-aortic balloon pump. Cardiac echo showed septal and lateral wall hypokinesia with a left ventricular ejection fraction of 63.9%. Laboratory data included WBC, 26,500/µL; platelet count, 280,000/µL; CRP, 35.1 mg/L; procalcitonin, 6.66 ng/mL; BUN, 53 mg/dL; creatinine, 2.45 mg/dL; albumin, 3.7 g/dL; SGOT, 898 IU/L and SGPT, 317 IU/L. CXR showed left hemithorax opacification as post-surgical change and right lower lung haziness. Antibiotic therapy with piperacillin/tazobactam was used. The sputum and blood cultures showed no growth. Continuous venovenous hemofiltration was performed for unstable hemodynamic status with renal failure (BUN/Creatinine, 153/6.38 mg/dL). As poor consciousness, brain CT was done and showed no acute intracranial lesion but EEG showed severe diffuse cortical dysfunction. Follow-up CXR showed worsening infiltrates over right lower lung with pleural effusion. Pig-tail catheter was inserted in to right pleural space. The sputum CMV-PCR (obtained on Aug. 4) was positive. Meanwhile, the patient had severely distended abdomen. The WBC was 25,300/µL and procalcitonin became 26.78 ng/mL. Abdominal CT showed air in the portal venous system and in the wall of the stomach, suspicious of gastric pneumotosis or emphysematour gastritis. Follow-up sputum culture yielded Sphingomonas parapaucimobilis, so antibiotic was shifted to ceftazidime. The blood CMV-PCR was also positive. The CMV virus load showed positive but the level was too low to detect (<137 IU/mL). Parenteral ganciclovir was used for 2 weeks. Follow-up abdomen CT showed complete resorption of air in the portal venous system and intramural air of stomach. The general condition and right lower lung infiltrates improved gradually. As difficult weaning from ventilator support, she was transferred to a respiratory care ward on September 10, 2014.

Conclusion: We report emphysematous gastritis associated with portal venous air in a patient with acute myocardial infarction post PCI. Concurrent CMV reactivation was detected in the sputum and blood. Although this condition often requires surgery, this case resolved with medical management, including antibiotics and ganciclovir therapy.