中文題目：李斯特菌引發的自發性腹膜炎在一位 HIV 感染合併肝硬化患者：個案報告及文獻回顧

英文題目：A rare case of spontaneous bacterial peritonitis caused by *Listeria monocytogenes* in a Taiwanese HIV-infected patient with liver cirrhosis

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Introduction: Spontaneous bacterial peritonitis (SBP) is an infectious complication well described in patients with advanced liver cirrhosis and ascites. The most frequently isolated causative organisms are gram-negative enteric bacteria. *Listeria monocytogenes* is seldom reported as a pathogen in SBP. Besides, although *L. monocytogenes* is known to affect hosts with impaired cell-medicated immunity, it is also a relatively rare opportunistic infection in the HIV/AIDS individuals compared to other immunodeficient populations. Here we present a rare case of Listeria SBP in a Taiwanese cirrhotic patient with concurrent HIV infection.

Case presentation: A 58-year-old Taiwanese man presented with dyspnea on exertion for 5 days. The associated symptoms were dry cough, distended abdomen, decreased urine output, dysphagia and poor appetite. His medical history was significant for HIV infection (but has been lost of follow-up for 10 months), alcoholic and chronic hepatitis C-related liver cirrhosis, stage 4 chronic kidney disease (CKD), and esophageal cancer post first course of concurrent chemoradiotherapy. His vital signs upon admission were blood pressure 101/55 mmHg, pulse rate 111 beats per minute, with a body temperature of 35.2℃and 91% oxygen saturation on ambient air. Physical examination found icteric sclera, fine crackles over bilateral basal lungs, distended abdomen without tenderness. Full blood examination revealed leukocytosis (20.56 x 1000/μL), elevated C-reactive protein (CRP, 199.17 mg/dL), acute kidney injury on CKD (creatinine of 3.5mg/dL, as baseline being 1.5mg/dL), hypoalbuminemia (2.6 g/dL), hyperbilirubinemia (Total Bilirubin= 3.47 mg/dL) and prolonged prothrombin time (17.2, INR=1.71). His CD4 count was 30 cells/μL. Chest radiography showed bilateral lower lungs interstitial pneumonitis. Paracentesis was done and much turbid ascites was drained with a neutrophil count of 4716 cells/mm3, which confirmed the diagnosis of SBP. With the impression of HIV/AIDS with

Pneumocystis jirovecii pneumonia (PJP) and SBP, antibiotics with trimethoprim-sulfamethoxazole (TMP-SMX) and flomoxef were prescribed. Follow-up blood tests and ascitic fluid analysis 4 days later showed significant improvement (WBC counts =12.42 x1000/μL; CRP= 94mg/dL; ascites neutrophils= cells/mm3). His symptoms of dyspnea and abdominal distention improved as well. Out of expectation, the peritoneal fluid culture yielded *L. monocytogenes* after 5 days. Fortunately, our initial selection of TMP-SMX for PJP is also effective for the *L. monocytogenes* SBP.

Conclusion: The uncommon cases of SBP caused by *L. monocytogenes* are mainly reported in the United states and Europe, especially in Spain. The dietary habit of eating raw fruits and vegetables and multiple types of dairy products is considered as a possible cause. Here we report such rare manifestation of *L. monocytogenes* in a Taiwanese HIV-infected patient with liver cirrhosis. While TMP-SMX is commonly used in treating certain AIDS-related opportunistic infections, such as PJP, toxoplasmosis and salmonellosis, the antimicrobial agent is also effective for *L. monocytogenes*. To the best of our knowledge, this is the first Asian case of *Listeria* SBP reported in the English literature.