

中文題目：維他命B12缺乏相關的嚴重全血球低下與溶血在一肝硬化之病人

英文題目：Vitamin B12 Deficiency Associated Profound Pancytopenia and Hemolysis in Cirrhotic Patient

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Abstract

This 72-year-old man had hepatitis C related liver cirrhosis and old pulmonary tuberculosis. He was presented to our emergent department because of dizziness and bilateral lower legs weakness for 1-2weeks. The blood test revealed white cell count (WBC) of $1.6 \times 10^9/L$, hemoglobin(Hb) of 5.2g/dl (Mean corpuscular volume (MCV) of 131.6 fl), Platelet count of $39 \times 10^9/L$, indicated that he had profound pancytopenia, included the marked macrocytic anemia. His reticulocyte production index was 0.7. His serum vitamin B12 showed far less than lower limit 65 pg/mL (range 180~914 pg/mL) and normal serum folic acid 10.84 ng/mL(range 3 ~20 ng/mL). Besides, his chemistry profiles showed high lactate dehydrogenase (LDH) 1371 units/L, total bilirubin 2.23mg/dL, indirect bilirubin 1.46mg/dL, and haptoglobin was not detectable (less than 5.83mg/dl, the lower limit of haptoglobin). Taken together, pancytopenia and hemolysis were impressed. His homocysteine level was within normal limit. Further more, on peripheral blood smear, there were some teardrop shaped red blood cells, macro-ovalocyte, and hypersegmented neutrophils were seen. No blast cells were detected. Bone marrow aspiration also revealed blasts (2%) within normal limit, and megakaryocyte count decreased. His autoimmune profiles were all within normal limit and no any tumor markers elevation. Gastroendoscopy showed reflux esophagitis, superficial and hemorrhagic gastritis but no evidence of gastric atrophy. After promptly intravenous vitamin B12 1mg administration every day, his hemoglobin elevated to 10.4 g/dl 7 days later and dramatically returned to 15.1 g/dl 3 months later. WBC was $4.8 \times 10^9/L$, Platelet counts were also back to $127 \times 10^9/L$. Besides, LDH was 215 units/L and total bilirubin was 1.08 mg/dL 1 week later indicated the hemolysis was resolved. Based on his clinical course, vitamin B12 deficiency associated profound pancytopenia and hemolysis was diagnosed.