中文題目：全血球減少症及 嗜中性白血球低下引發發燒導因於 缺乏維他命 B12: 一病例報告

英文題目：Megaloblastic Pancytopenia and Neutropenic Fever Caused by Vitamin B12 Deficiency -A Case Report

作　　者：林佳靜 [1]， 王俐婷 [2], 沈修年 [1]

服務單位：奇美醫學中心加護醫學部 [1], 奇美醫學中心胃腸肝膽科 [2]

Introduction：

Many patients exist no or only mild anemia, and macrocytosis may be masked by a concurrent disorder (eg, iron deficiency, thalassemia). Assays of serum or red cell folate, serum B12, methylmalonate, and homocysteine are required to confirm the diagnosis of folate and/or vitamin B12 deficiency.

Case report:

This 66 years-old female, deaf-mute, she was brought to emergency room (ER) due to tarry/bloody stool passage noted by her son today. While in ER, Hb of 2.6g/dl was found. Panendoscopy revealed 1) gastric ulcer, 2) atrophic gastritis and 3) hemorrhagic gastritis. The Colonoscopy showed 1) Colon diverticulum,2) internal hemorrhoids. It did not show obvious source of blood loss. Pancytopenia with neutropenic fever/severe sepsis developed during intensive care unit (ICU) stay. Bone marrow biopsy was done and showed megaloblastic anemia, which was further confirmed by low serum Vitamin B12 level (<100pg/ml). Vitamin B12 supplement was started. Before the recovery of hemogram, pneumonia with severe sepsis and septic cardiomyopathy related lung edema occurred. His son asked for comfort care only and refused endotracheal intubation. After antibiotics, diuretics and non-invasive ventilator use, her condition improved and stabilized later. She was transferred to general ward. Then Vitamin B12 subcutaneous injection shifted to oral form. Neurologist was also consulted for suspecting dementia. The general condition kept stable, she was discharged with regular follow-up.

Discussion:

In the population that was randomly screened for low serum B12, the sensitivity of the Mean corpuscular volume (MCV) for B12 deficiency was 17%, whereas the sensitivity was 30% for B12 deficiency in patients with anemia. Hypersegmentation was more sensitive (91%) than MCV greater than 95 fl (62%) or Red blood cell distribution width greater than 15% (54%) in detecting B12 deficiency. The MCV should not be used as the only parameter ruling out the diagnosis of B12 deficiency.