

中文題目:假性低血糖:華氏巨球蛋白血症患者罕見的初期表現

英文題目: Spurious hypoglycemia as a rare presentation of Waldenström macroglobulinemia

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Abstract

Spurious hypoglycemia is a rare manifestation of Waldenström macroglobulinemia (WM). Herein, we reported a clear patient presented with intermittent nasal bleeding in 3 months and fever for one day. At ED, one of the dramatic abnormal laboratory test was remarkable hypoglycemia (< 10 mg/dl twice Hexokinase UV method). However, repeated capillary blood point-of-care glucose monitor (one touch) revealed normoglycemia. Other blood tests showed leukocytosis (WBC: 13,030/dl, N/L: 87.9%/ 9.4%), elevated CRP (10.3 mg/dl), and azotemia (serum creatinine: 9.4 mg/dl; BUN 127 mg/dl) with high anion gap acidosis (vein gas: pH: 7.312, HCO₃⁻: 9.9 mmol/l, PaCO₂: 20.0 mmHg, anion gap: 19.1 mmol/L). On admission, high serum total protein (8.7 g/dl) and low albumin (2.9 g/dl) with reversed A/G ratio (0.4) as well as spotting urine protein/ urine Cr of 2.58 mg/mg and protein 3+ by urine routine test were observed. On physical examination, it revealed crackles at the right lung field and tender multiple nodular lesions on the bilateral plantar region but no enlarged lymph nodes or hepatosplenomegaly. M component with high serum IgM (9,190 mg/dl), kappa chain dominance ($\kappa/\lambda=28.25$) and hyperviscosity (3.5) were noted. Hematological malignancy with paraproteinemia was suspected. The results of bone marrow and renal kidney biopsy showed lymphoplasmacytic lymphoma infiltration and WM was diagnosed. After 4 sessions of plasma exchange treatment, his serum IgM decreased (1,560 mg/dl) and the serum blood glucose concentration (156 mg/dl) was in accordance with the one touch test (174 mg/dl). The case not only sheds the light on the necessity of evaluation of paraproteinemia when discordance of blood glucose level presents, but more importantly, the discordance could be reversed by plasmapheresis.

關鍵字:假性低血糖、異常血蛋白症、華氏巨球蛋白血症

Key words: spurious hypoglycemia, paraproteinemia, Waldenström macroglobulinemia