

中文題目：一個長期洗腎病人併發惡性高血鈣

英文題目：Malignant hypercalcemia in a long term hemodialysis patient

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A 84-year-old woman was brought to our hospital due to consciousness disturbance for a week. She received long term hemodialysis since 5 years ago. She also suffered from hypertension and sick sinus syndrome post permanent pacemaker implantation. Brain computed tomography in emergent department showed brain atrophy. Laboratory tests revealed hypercalcemia (calcium 3.13 mmol/L), hypoalbuminemia (albumin 3.0 g/dL) and anemia (hemoglobin 11.8 g/dL). After she was in our ward, she received low calcium dialysis for her hypercalcemia. Besides, she complained chronic bilateral knee pain and osteoarthritis was suspected by the radiologic report. Thyroid function and adrenal function were normal. Serum intact parathyroid hormone (iPTH) was 294.7 pg/mL. No calcium salts, vitamin D or sedative drugs were administered recently.

Chronic kidney disease is often characterized by hypocalcemia. However, hypercalcemia could occur in patients with renal failure. Calcium salts or vitamin D overdose, malignant hypercalcemia, autonomous parathyroid hormone secretion and autocrine cytokine secretions should be considered. Therefore, we arranged blood immunofixation electrophoresis examination for her and the result revealed positive finding of M-protein. Further laboratory test showed high β 2-microglobulin level (β 2-microglobulin 25025 ng/mL). Bone marrow biopsy showed increased plasma cells (about 10-20%) with lambda light chain monoclonality (kappa light chain: almost negative; lambda light chain: diffusely positive). In this case, hypercalcemia is an important clue for multiple myeloma. Therefore, malignant hypercalcemia should not be neglected in long term dialysis patients.