

中文題目：案例報告---致命性高血鎂

英文題目：Fatal hypermagnesemia in normal renal function patient: A Case Report

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Abstract

This 59-year-old bed-ridden patient presented at emergency department with abdominal fullness and vomiting for one day. He had history of stroke, diabetes mellitus, hypertension and coronary artery disease. He had laxatives such as magnesium oxide and sennoside for chronic constipation since several years ago.

At triage, his body temperature was 36.3°C, the blood pressure was 117/71 mmHg, the pulse rate was 89 per minute, the respiratory rate was 20 per minute. Distended and tympanic abdomen with hyperactive bowel sound was noted. The remainder of physical examination was unremarkable. Blood test showed hyponatremia (129mmol/L), mild elevated magnesium (3.6 mg/dL), normal potassium (4.3mmol/L) and serum creatinine (1.28 mg/dL). The other serum biochemistry datas were unremarkable. Plain abdominal radiography demonstrated massive fecal material in the colon with marked increased bowel gas suggestive of marked intestinal ileus. Some laxatives and propulsive were given for symptom relief.

Sudden blood pressure drop to 82/58 mmHg, severe bradycardia (23/minute) and hypothermia (31.3°C) occurred about 12 hours later. Blood test showed hypokalemia (3.3mmol/L), normal calcium (8.8mg/dL) and severe hypermagnesemia (10.6 mg/dL) with elevating serum creatinine (1.98 mg/dL). Inotropic agent was given and temporary pacemaker implantation was also performed. Hydration and calcium chloride were given to lower magnesium. But patient became anuria. Follow-up serum magnesium became 13.7 mg/dL after 4 hours. Emergent hemodialysis was done and serum magnesium decreased to 8.7mg/dL after hemodialysis. However, the hypotension and hypothermia persisted and hypoglycemia episode occurred about 8 hours later. The patient died of ischemic bowel and sepsis.