Hypokalemic Myopathy due to Excessive Consumption of Cola

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A 30-year-old man was admitted for hypokalemic myopathy due to excessive consumption of cola and oolong tea. He had a 4-year history of manic-depressive illness and polydipsia, and had consumed 1.5-2.5 L of cola (0.12 mg/mL caffeine content) and 1.5-3.0 L of oolong tea (0.2 mg/mL caffeine content) daily for the previous 3 months. Fat-suppressed T2-weighted images showed high intensity signals within the muscles of the thighs (Picture 1). Laboratory findings included serum potassium 2.3 mmol/dL and CK 12,285 U/L. Two months before admission, his potassium level had been 4.3 mmol/dL. Steady clinical recovery was noted following treatment that included cessation of soft drink consumption and potassium supplementation. Water deprivation test showed psychogenic polydipsia. Caffeine intoxication is thought to have played a major role in cola-induced hypokalemia (1, 2). It is important for physicians to keep excessive cola and oolong tea consumption in mind as a possible cause for hypokalemic myopathy.

References