Life-threatening hypokalemic paralysis in a young bodybuilder

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Case Report - Life-threatening hypokalemic paralysis in a young bodybuilder

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We report a case of life-threatening hypokalemia in a 28-year-old bodybuilder who presented with sudden onset bilateral lower limbs paralysis few days after his bodybuilding competition. His electrocardiogram (ECG) showed typical u-waves due to severe hypokalemia (serum potassium 1.6 mmol/L, reference range (RR) 3.5-5.0 mmol/L). He was admitted to the intensive care unit (ICU) and was treated with potassium replacement. The patient later admitted that he had exposed himself to weight loss agents of unknown nature, purchased online, and large carbohydrate loads in preparation for the competition. He made a full recovery after a few days and discharged himself from the hospital against medical advice. The severe hypokalemia was thought to be caused by several mechanisms to be discussed in this report. With the ever rising number of new fitness centers recently, the ease of online purchasing of almost any drug, and the increasing numbers of youngsters getting into the bodybuilding arena, clinicians should be able to recognize the possible causes of sudden severe hypokalemia in these patients in order to revert the pathophysiology.