Thiamine deficiency secondary to anorexia nervosa: an uncommon cause of peripheral neuropathy and Wernicke encephalopathy in adolescence.

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INTRODUCTION: We present a developmentally appropriate adolescent boy who presented with upper and lower extremity glove-and-stocking paresthesias, distal weakness, vertigo, high-pitched voice, inattention, ataxia, and binocular diplopia after a voluntary 59-kg weight loss over 5 months.

CLINICAL INVESTIGATIONS: Extensive investigations revealed serum thiamine levels <2 nmol/L. Brain magnetic resonance imaging revealed symmetric abnormal T2 prolongation of the mammillary bodies. Nerve conduction studies were consistent with axonal, length-dependent polyneuropathy. Together, these findings were diagnostic for peripheral polyneuropathy and Wernicke encephalopathy secondary to thiamine deficiency.

CONCLUSION: This patient illustrates that eating disorders can be an uncommon cause of rapidly progressive paresthesias, weakness, and neurological decline due to thiamine deficiency.

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