Myopathy in thiamine deficiency: analysis of a case.


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BACKGROUND: Tenderness in the limb muscles has been reported anecdotally in patients with beriberi neuropathy, but clinical effects of thiamine deficiency on skeletal muscle have received little attention.

OBJECTIVE: To describe a patient with thiamine deficiency who manifested myopathic symptoms and responded well to thiamine supplementation.

PATIENT: A 26-year-old woman with neuropathy and heart failure associated with thiamine deficiency also complained of myalgia and weakness, most troublesome in the proximal portions of the limbs.

RESULTS: Serum creatine kinase, myoglobin, and aldolase concentrations were abnormally elevated. Magnetic resonance imaging of lower limb muscles demonstrated areas of high signal intensity in T2-weighted images and showed Gd-DTPA enhancement. A biopsy specimen from the quadriceps muscle showed myopathic changes without neurogenic changes. Abnormalities improved well with thiamine administration.

CONCLUSION: Myopathy may occur in patients with thiamine deficiency.

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