A rare presentation of a common condition: polymyositis like syndrome in hypothyroidism

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Case report

A 42 year-old previously healthy labourer presented with muscle pain, difficulty in getting up from the squatting position and inability to carry out his normal work for five months duration. He also had increasing sleepiness, loss of appetite and cold intolerance.

He had coarse features with loss of hair in the outer third of the eyebrows. Voice was hoarse and the skin was dry. Severe muscle tenderness was noted in both thighs with a positive Gower's sign. Shoulder girdle muscles were unaffected. He also had bradycardia and slow relaxing ankle jerks. He did not have a goiter.

His creatinine phosphokinase (CPK) was 5000 U/L. Electromyographic features were compatible with nonspecific myopathic changes. TSH was 50 miu/L while ESR was 20 mm for the first hour.

Echocardiography showed a trivial pericardial effusion. All the other routine investigations including FBC, serum creatinine, serum electrolytes were normal.

He showed a marked improvement with thyroxine 100 µg/day. His myalgia disappeared totally. CPK and TSH values were normalised after 8 weeks of therapy.

Discussion

Patients with hypothyroidism have frequent muscle complaints and proximal muscle weakness occurs in about one third of them [1]. Elevated CPK levels up to ten times of normal is often seen [1]. But our patient had a marked elevation of CPK with severe myalgia and muscle tenderness than what is usually seen with hypothyroidism.

There had been few similar case reports. A MEDLINE review of cases reported over the past twenty five years has shown a mean CPK of 2164 (SD = 1954) U/L and the mean TSH of 114.8 (SD = 85.6) miu/L. Only 50% of the patients have undergone electromyography; half of the studies have been normal while the other half had nonspecific features [2]. Our patient's findings were keeping with above values.

Hypothyroid patients presenting with predominant muscle tenderness can be misdiagnosed and mismanaged as suffering from polymyositis. This case report emphasises the importance of ruling out undergoing hypothyroidism in patients with proximal muscle tenderness or elevated CPK.

References
