

Hoffmann syndrome: a case report

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Background:

Hoffmann syndrome is a rare form of hypothyroid myopathy in adults characterized by presence of muscle weakness, stiffness and pseudo-hypertrophy. Here, we report a case of Hoffman syndrome aggravated by statin therapy.

Case report:

We describe the case of a 60 year old woman with primary hypothyroidism who presented with fatigue, cold intolerance, constipation, exertional breathlessness, progressive proximal muscle weakness and swelling of the legs for 3 months. She had a history of coronary heart disease treated by statin therapy. Examination revealed pseudo-hypertrophy of calf muscles with marked symmetrical proximal upper and lower limb weakness. The electrocardiogram revealed an atrial fibrillation.

Her TSH and Creatine phosphokinase (CPK) levels were significantly elevated. Following institution of replacement therapy with thyroxine, the patient showed marked clinical and biochemical improvements after six months, but insignificant decrease in muscle mass.

Discussion and Conclusion:

Our patient had hypothyroid myopathy with muscle hypertrophy, which is extremely rare . Hoffman syndrome is a very rare form of hypothyroid myopathy seen in adults with long standing untreated hypothyroidism(1) . It is characterized by proximal limb muscle weakness and pseudohypertrophy. Although the levels of the muscle enzymes creatine kinase and lactic dehydrogenase are markedly elevated in hypothyroid myopathy, the exact pathophysiological mechanism of this condition is incompletely understood. However postulated mechanisms for muscle pseudohypertrophy includes increase deposition of Glycosaminoglycans ,increase muscle fiber size and number (2) . Also atrophy of type II fibers and presence of fibrillar inclusions have beendescribed

The diagnosis should be suspected when a patient with calf muscle hypertrophy is also treated by statin therapy.

References:

- 1- Senanayake et al / Hoffman syndrome : a case report . International Archives of Medicine 2014
- 2-Praveen KAS et al. Hoffman's syndrome : A rare neurological presentation of hypothyroidism . In j nutr Pharmacol Neurol Dis 2011