Diabetes Mellitus, Statins and devastating myopathy

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We report a 50 year-old gentleman of Asian ethnicity, with known Type 2 Diabetes Mellitus, Hypertension and Hypercholesterolaemia. He presented with a 3 month history of worsening myalgia, generalised weakness, fatigue, fever, night sweats, dysphagia and 4kg weight loss. His medications included Simvastatin, Ramipril, Amlodipine and Metformin.

He had numerous presentations to his GP in the preceding months and was treated as a viral illness. He subsequently could not walk and was severely debilitated hence was referred to A&E where he was assessed. Examination revealed markedly reduced power in the proximal muscles bilaterally with normal power in peripheral muscle groups. Sensation, reflexes and tone were normal. His Creatinine Kinase was grossly elevated at 24,514iu (40-320iu/L). Investigations ruled out TB. EMG revealed myopathic changes with an acute inflammatory response in the proximal muscles. MRI of the muscles showed oedema and muscle biopsy confirmed a severe acute myopathy with necrosis and myophagocytosis. Serum 3-hydroxy-3-methylglutaryl-coenzyme-A (HMG-Co-A) antibody was positive. The patient later confirmed that his symptoms gradually began after commencing Simvastatin.

Treatment was initially with IV methyprednisolone and subsequently high dose prednisolone followed by intravenous immunoglobulin. He recovered fully over the next 2-3 months.

Whilst myopathy is a rare side-effect of statins, drug cessation may not result in symptom relief if the patient has developed autoantibodies to HMG-Co-A reductase. Patients and clinicians should be aware of the side effects of statins and weigh their risks and benefits. Should statins be used as primary prevention in all patients with diabetes?