A rare case of Statin induced Autoimmune Necrotising Myopathy

Inflammatory myopathies' prevalence ranges from 2.4 to 3.8 per 100,000 population. Statin induced autoimmune myopathy is a very rare condition with a prevalence of 0.9 to 1.4 cases per 100,000 people. Here, we discuss a case of one of three subtypes of Immune mediated necrotising myopathy. Our patient in late 60s with diabetes mellitus type ll, hyperlipidemia presented to the ambulatory clinic with a six month history of progressively worsening proximal muscle weakness. Initial labs including ESR, CRP was normal, although CK was elevated >8000. Patient remained symptomatic after discontinuation of statins, and was later started on steroids followed by mycophenolate mofetil and azathioprine with good effect. Diagnosis was confirmed with muscle biopsy consistent with necrotizing myopathy and anti HMGCR (anti HMG CoA-reductase) antibodies. As per European Neuromuscular Center, Immune mediated necrotising myopathy has the following subtypes: anti-signal recognition particle (anti-SRP) myopathy, anti-HMGCR myopathy (statin-exposed and non statin exposed), and antibody-negative IMNM. Pathogenesis is postulated to be caused by myocyte necrosis mediated by activation of classical complement pathway by statins. Certain HLA subtypes can genetically predispose to production of autoantibodies. It can also present in patients previously treated with statins who have not taken them for several years and in those not exposed to statins at all. Anti-HMGCR antibody remains gold standard test with 99% sensitivity and 94% specificity. CK levels are found elevated invariably in all cases. Early diagnosis and treatment with immunosuppressive agents usually cause the resolution of symptoms.