

## PCSK9 inhibitors to lower cholesterol in patients with statin-associated autoimmune myopathy

February 19 2019





Credit: CC0 Public Domain

Clinicians should consider using PCSK9 inhibitors to lower cholesterol in patients with statin-associated autoimmune myopathy. Findings from a case report are published in the *Annals of Internal Medicine*.

Beyond its toxic effect, statin use has been associated with a rare but potentially severe and disabling type of muscle disease known as statin-associated autoimmune myopathy. Its distinguishing features are the persistence after withdrawal of statins and its association with antibodies against 3-hydroxy-3methylglutaryl coenzyme A reductase (HMGCR). Management usually requires steroids and other immunosuppressive therapies. Other cholesterol-lowering medications and dietary supplements can cause or worsen this myopathy, which makes decreasing cholesterol levels very challenging in these patients. Treatment with PCSK9 monoclonal antibodies is a relatively new way to decrease cholesterol levels and cardiovascular morbidity and mortality in high-risk patients.

Researchers from University Hospital Principe de Asturias, Madrid, Spain, treated two male patients with hypercholesterolemia and severe, diffuse coronary artery disease who received prolonged treatment with a statin and developed an insidious and necrotizing autoimmune myopathy. Both patients were treated with steroids, immunosuppressive drugs, and intravenous immunoglobulins and all myopathy manifestations gradually resolved. Because the patients still needed cholesterol treatment, they were given evolocumab, a monoclonal antibody against PCSK9. Their LDL cholesterol levels decreased 55 percent in one patient and 56.4 percent in the other, and neither had a



recurrence of myopathy. According to the researchers, its specific mechanism of action and these findings suggest that clinicians should consider using PCSK9 inhibitors in patients who develop statin-associated autoimmune myopathy and need treatment to decrease their cholesterol levels because of their high risk for coronary artery disease.

**More information:** Juan de Dios García-Díaz et al. Proprotein Convertase Subtilisin/Kexin Type 9 Antibody and Statin-Associated Autoimmune Myopathy, *Annals of Internal Medicine* (2019). <u>DOI:</u> 10.7326/L18-0705

## Provided by American College of Physicians

Citation: PCSK9 inhibitors to lower cholesterol in patients with statin-associated autoimmune myopathy (2019, February 19) retrieved 25 April 2024 from <a href="https://medicalxpress.com/news/2019-02-pcsk9-inhibitors-cholesterol-patients-statin-associated.html">https://medicalxpress.com/news/2019-02-pcsk9-inhibitors-cholesterol-patients-statin-associated.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.