

In a recent study of adults with muscle pain and weakness related to intake of statin drugs, CoQ10 supplementation for six months significantly improved muscle strength and reduced muscle pain.

Coenzyme Q10 supplementation improves muscle health in adults with statin-related myopathy

Statin drugs are commonly prescribed for people at high risk of developing heart disease, and are known to significantly reduce cardiovascular disease (CVD) mortality in people with preexisting CVD. Unfortunately, one of the side effects of statins is myopathy, a wasting of muscle that causes weakness and in rare cases, kidney failure. Since statins reduce the production not only of cholesterol but also of CoEnzyme Q10 (CoQ10), it is thought that statin myopathy may result from mitochondrial dysfunction in muscle caused by CoQ10 deficiency.

In a new study published in *Neuroendocrinology Letters*, researchers analyzed the effect of coenzyme Q10 supplementation in patients with statin myopathy.

The study included 28 adults with an average age of 60 years old that were treated with different types and doses of statins. Researchers monitored muscle weakness and pain using a scale of one to ten. Analysis of muscle problems was performed at baseline and at 3 and 6 months after administration of CoQ10.

Serum levels of CoQ10 increased in the subjects by more than 194% during the study period. At six months of CoQ10 supplementation, pain decreased on the average of 53.8% and muscle weakness by 44.4%.

In this study of patients with myopathy, 6 months of CoQ10 supplementation significantly reduced muscle pain and sensitivity. Although this was a relatively small study, the results are similar to a previous study of statin-associated myopathy patients that showed a 40% decrease in pain severity and a 38% reduction in pain interference with daily activities among those taking 100 mg of CoQ10 for 30 days. Although the connection between CoQ10 levels and statin-related myopathy is not conclusive, discussing the potential benefits of CoQ10 supplementation with a physician while on statin therapy may be advisable.

Zlatohlavek L et al. The effect of coenzyme Q10 in statin myopathy. *Neuro Endocrinol Lett.* 2012 Nov 28;33(Suppl2):98-101

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