

A combination of acetyl-L-carnitine, n-3 fatty acids and coenzyme q10 improves visual functions in early age-related macular degeneraiton. [1] -

GreenMedInfo Summary

Abstract Title:

Improvement of visual functions and fundus alterations in early age-related macular degeneration treated with a combination of acetyl-L-carnitine, n-3 fatty acids, and coenzyme Q10.

Abstract Source:

Abstract Author(s):

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Abstract:

The aim of this randomized, double-blind, placebo-controlled clinical trial was to determine the efficacy of a combination of acetyl-L-carnitine, n-3 fatty acids, and coenzyme Q10 (Phototrop) on the visual functions and fundus alterations in early age-related macular degeneration (AMD). One hundred and six patients with a clinical diagnosis of early AMD were randomized to the treated or control groups. The primary efficacy variable was the change in the visual field mean defect (VFMD) from baseline to 12 months of treatment, with secondary efficacy parameters: visual acuity (Snellen chart and ETDRS chart), foveal sensitivity

as measured by perimetry, and fundus alterations as evaluated according to the criteria of the International Classification and Grading System for AMD. The mean change in all four parameters of visual functions showed significant improvement in the treated group by the end of the study period. In addition, in the treated group only 1 out of 48 cases (2%) while in the placebo group 9 out of 53 (17%) showed clinically significant (>2.0 dB) worsening in VFMD ($p = 0.006$, odds ratio: 10.93). Decrease in drusen-covered area of treated eyes was also statistically significant as compared to placebo when either the most affected eyes ($p = 0.045$) or the less affected eyes ($p = 0.017$) were considered. *These findings strongly suggested that an appropriate combination of compounds which affect mitochondrial lipid metabolism, may improve and subsequently stabilize visual functions, and it may also improve fundus alterations in patients affected by early AMD.*

Article Published Date : May 01, 2005

Study Type : Human Study

Additional Links

Substances : [Coenzyme Q10 : CK\(1234\) : AC\(183\) \[2\]](#), [Omega-3 Fatty Acids : CK\(3849\) : AC\(463\)\[3\]](#)

Diseases : [Macular Degeneration : CK\(207\) : AC\(34\) \[4\]](#)

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[3] <http://www.greenmedinfo.com/substance/omega-3-fatty-acids>

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