Abstract


Water-soluble coenzyme Q10 formulation in presbycusis: long-term effects.

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OBJECTIVES: The aim of this study was to evaluate the long-term effects of a water-soluble formulation of CoQ10 (Q-TER) in subjects with presbycusis.

METHODS: Sixty patients with presbycusis were included and divided at random into three numerically equal groups. For 30 days, group A underwent therapy with Q-TER, group B underwent therapy with vitamin E, and group C received placebo. Before, at the end, and 6 months after the end of the treatment, all patients underwent evaluation of pure tone audiometry, transient evoked otoacoustic emissions and otoacoustic products of distortion, auditory brainstem response, and speech audiometry.

RESULTS: Compared with group B, at the end of the treatment in group A the pure tone audiometry showed a significant (p < 0.05) improvement of the audiometric thresholds at 1000, 2000, 4000, and 8000 Hz. This improvement was confirmed by the speech audiometry and last check. We found no significant differences in the other parameters and in group C.

CONCLUSION: These findings provide the basis for understanding the duration of the effect after the last use of the drug and encourage a larger clinical trial to collect additional evidence on the effect of coenzyme Q10 (CoQ10) in preventing the development of hearing loss in subjects with presbycusis.

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