

Vitamin E and Coenzyme Q10 trial in Friedreich's ataxia

Work at the Royal Free and University College Medical School (London) has focused on research into Friedreich's ataxia (FA) for a number of years. Recently we completed a pilot trial in which we tested whether Vitamin E and Coenzyme Q10 had any beneficial effects in people with FA.

Ten FA patients (between the ages of 16 and 40 years of age) were included in this trial and they were given 400mg of CoQ10 and 2,100IU of Vitamin E per day. Before starting the trial the amount of energy produced in the heart and skeletal muscle was lower in people with FA compared with healthy volunteers. After just 3 months of treatment significant improvements in the level of energy produced by skeletal muscle and heart were seen in the FA patients, and this has continued to improve at the 6, 12, 24 and 36-month assessments.

To test whether these improvements had any effect on the clinical course of the disease we assessed disease severity using an international clinical rating scale of ataxia. This involves tests of coordination, balance, speech, etc. The results suggest that whilst 2 patients were continuing to show a progression in their clinical state, the clinical scores of the other 8 patients remained either relatively unchanged or had slightly improved. In conclusion, it appears that the therapy may be effective in retarding disease progression. The Coenzyme Q10 and Vitamin E were also well tolerated by all ten patients and did not cause noticeable side effects.

Although these results are very encouraging, they are based on a very small number of people, so a larger trial is needed before any recommendations on therapy can be made. A larger trial is currently underway at the Royal Free Hospital to assess this therapy using more stringent criteria. For example this new study involves the participants being split into 2 groups, one given a low dose of therapy and one given a high dose, and the effect of the therapies is being compared.

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Please note that we are publishing the results of this pilot trial for information purposes only. No person shall have any claim of any nature whatsoever arising out of or in connection with this publication against Ataxia UK, the Royal Free Hospital, the Royal Free and University College Medical School or any of their officers or employees.

Readers must seek their own medical advice before taking any action based on the results of the pilot trial. In particular, it is important that readers seek their own medical advice before taking the high doses of Coenzyme Q10 and Vitamin E taken by the trial patients.