Reference:

Randomized controlled trial of ethyl-eicosapentaenoic acid in Huntington disease: the TREND-HD study


Department of Neurology (Dr. Ira Shoulson), University of Rochester and other at 41 study locations.

Summary:

Huntington’s disease is characterized after onset by uncoordinated jerky body movements along with a decline in selected mental capabilities including considerable variation between individuals with the condition. The global prevalence of the condition is approximately one person in 14,000 with considerable variations between geographical locations. Onset of Huntington’s disease is more common between the mid-40s; onset before age 28 is referred to as ‘juvenile’ Huntington disease. The TREND-HD study was designed to determine whether supplementation with EPA (eicosapentaenoic acid) as the ethyl-ester form of EPA would possibly improve the motor features of Huntington disease. This six-month multicenter randomized, double-blind, placebo-controlled trial was followed by a six-month open-label phase where initial treatment assignments were not disclosed. Three hundred and sixteen adults with Huntington disease participated in the trial and patients were randomly assigned to receive placebo or ethyl-EPA at a dose of one gram taken twice daily. After six months, the Total Motor Score 4 showed no significant difference in those receiving EPA supplementation as compared to those receiving placebo. Furthermore, the Score did not worsen for those who had received EPA treatment for 12 continuous months as compared to those who received active treatment for only 6 months based on completion of the open-label phase. The authors concluded that ethyl-EPA was not beneficial in patients with Huntington disease during the 6 months of placebo-controlled evaluation.
Dr. Holub's Comments:

Although the present trial results were disappointing with respect to potential benefits for EPA omega-3 fatty acid therapeutics on the Total Motor Score in patients with Huntington disease, it is expected that additional trials will be performed in the future wherein concentrates of DHA (docosahexaenoic acid) and mixtures of DHA + EPA for varying doses and durations will likely be evaluated. Potential benefits of EPA supplementation on risk factors for cardiovascular disease which are prevalent in the general population including patients with Huntington disease were not evaluated in the present investigation.