Reduction in Stroke Recurrence with EPA Supplementation

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Reference:

Reduction in the Recurrence of Stroke by Eicosapentaenoic Acid for Hypercholesterolemic Patients. Subanalysis of the JELIS Trial


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Summary:

The JELIS trial from Japan as previously reported (Lancet, 369:1090-1098 (2007)) indicated a beneficial/protective effect of EPA supplementation in patients on statin therapy with respect to major coronary events. This present report represents a sub-analysis of the JELIS trial and focuses upon the potential beneficial effects of EPA supplementation on stroke recurrence over a 5 year period in those subjects having suffered a primary stroke.

In this secondary prevention subgroup, 457 of the stroke patients received a placebo (control) supplement while 485 stroke patients received daily supplementation with EPA (eicosapentaenoic acid) at a level of 1800 mg/day over a 5 year period. All patients were maintained on cholesterol-lowering statin therapy. Stroke recurrence occurred in 10.5% of those on placebo (no EPA group) as compared to only 6.8% of those receiving EPA supplementation. EPA supplementation was found to provide a 20% relative reduction in recurrent stroke.

Dr. Holub's Comments:

Stroke recurrence is a major public health problem with considerable mortality and cumulative debilities and cognitive dysfunction amongst stroke survivors. Stroke recurrence rates are
generally very high despite aggressive intervention with appropriate lifestyle and pharmaceutical intervention (for blood pressure control, cholesterol reduction, etc.). Some countries report recurrence rates of strokes among stroke survivors that ranges up to 35% at 5 years and 51% at 10 years. The present study indicates that supplementation with the long-chain omega-3 fatty acid in the form of EPA may offer considerable benefit in reducing the rate of stroke recurrence when used as a supplementary intervention in addition to standard clinical care. It is important to note that the background Japanese diet is one of the highest in EPA+DHA due to the high consumption of fish/seafood on a regular basis (such that the background intake of EPA/DHA combined approaches 750-900 mg/day). Thus, the total intake of EPA+DHA (by EPA supplementation and fish/seafood intake supplying EPA+DHA) would be expected provide approximately 2700 mg of EPA+DHA (combined) per day in the EPA-supplemented patients. Future studies which evaluate the potential efficacy of DHA supplementation when compared directly with EPA or varying mixtures of DHA+EPA at varying doses will be of utmost importance in future trials.