Reference:

Ethyl-Eicosapentaenoic Acid in First-Episode Psychosis: A Randomized, Placebo-Controlled Trial


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Summary:

The evidence-based literature indicates, from isolated placebo-controlled studies in established schizophrenia and bipolar disorder, evidence that fish oil concentrates enriched in EPA may possibly offer some beneficial effects in psychotic disorders in selected patients. The present study was conducted to determine the potential efficacy of EPA omega-3 fatty acid supplementation in patients exhibiting first-episode psychosis (FEP) with respect to the potential improvement of antipsychotic efficacy. The average age of the patients studied were relatively young (mean age of 21 years) and was predominantly male, showing a duration of untreated psychosis of approximately 7-10 months on average. Approximately two-thirds of the patient population of 80 had a family history of psychosis. Half the patients (40) were allocated to daily supplementation with EPA (eicosapentaenoic acid, 20:5n-3) given in the ethyl ester form at the level of 2000 mg/day over a 12 week period. The other half of the patient group (40) was allocated to receive a placebo lacking omega-3 fatty acids. This was a randomized, double-blind, placebo-controlled, parallel-group, single-center augmentation trial. Appropriate medications benzodiazepines, others) were allowed for behavioural control if clinically indicated. Selective serotonin re-uptake inhibitors were also allowed when significant depressive symptomatology was present. The patients were evaluated over five study visits including baseline assessments prior to initiation of the supplementation (EPA or placebo) followed by assessments at weeks 3, 6, 9 and 12. Appropriate clinical/psychiatric evaluations were performed including notation of any adverse effects.
Analysis for accumulative response rates showed a higher response rate in patients on EPA vs. placebo at week 6 (43% vs. 18%) for all participants and for the non-affective psychosis subset (54% response vs. 17%). However, the latter differences were no longer statistically significant at the 12 week trial. Assessment of secondary outcome measures revealed that EPA-supplemented participants required 20% less anti-psychotic medication between weeks 4 through 6 and exhibited less side effects during the initial 9 weeks as compared to controls. Although the authors were not able to demonstrate a sustained symptomatic benefit of EPA in early psychosis, their findings suggested that EPA may accelerate treatment response and improve the tolerability of anti-psychotic medications. The improvements indicated with EPA in terms of the tolerability of atypical anti-psychotic medication included less constipation and less sexual dysfunction.

Dr. Holub's Comments:

The present publication strongly supports a justification for further controlled clinical trials using varying doses of EPA (with or without differing levels of DHA) from fish oil/concentrates of varying durations in patients with nonaffective early psychosis. The level of EPA intake (2000 mg/day) used in the present study is markedly higher than intakes in most countries (example, 40-50 mg/day of EPA are typical average intakes in North America). In the United States, the Food and Drug Administration has indicated that up to 3000 mg of DHA/EPA (combined per day) is generally considered safe for most of the population. They advise that no more than 2000 mg of this total should come from supplemental sources (with the rest coming from foods such as fish and functional foods containing DHA/EPA).