Eicosapentaenoic acid (EPA, an omega-3 fatty acid from fish oils) for the treatment of cancer cachexia

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Authors' objectives

Background: Cancer cachexia is a distressing weight loss syndrome commonly seen in advanced cancer patients. It is associated with reduced quality of life and shorter survival time. Eicosapentaenoic acid (EPA) is a long chain polyunsaturated fatty acid found naturally in some fish which has been used to decrease weight loss, promote weight gain and increase survival times in patients affected with cancer cachexia. Objectives: To evaluate the effectiveness and safety of EPA in relieving symptoms associated with the cachexia syndrome in patients with advanced cancer. Search methods: Studies were sought through an extensive search of a range of electronic databases. Hand searching was conducted on selected journals and reference lists as well as contact made with investigators, manufacturers and experts. The most recent electronic search was conducted in February 2005. Selection criteria: Studies were included in the review if they assessed oral EPA compared with placebo or control in randomised controlled trials of patients with advanced cancer and either a clinical diagnosis of cachexia or self-reported weight loss of 5% or more. Data collection and analysis: Both methodological quality evaluation of potential trials and data extraction were conducted by two independent review authors. Main results: Five trials (involving 587 participants) met the inclusion criteria. Three trials compared EPA at different doses with placebo with two outcomes, nutritional status and adverse events comparable across two of the three included trials. In addition, two trials compared different doses of EPA with an active matched control. It was possible to compare the outcomes of weight, quality of life and adverse events across these two trials. There were insufficient data to define the optimal dose of EPA. Authors' conclusions: There were insufficient data to establish whether oral EPA was better than placebo. Comparisons of EPA combined with a protein energy supplementation versus a protein energy supplementation (without EPA) in the presence of an appetite stimulant (Megestrol Acetate) provided no evidence that EPA improves symptoms associated with the cachexia syndrome often seen in patients with advanced cancer.


Bibliographic details

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