Abstract

Title: Can regular oral supplementation of fish oils improve symptoms in psoriasis?

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Background: Psoriasis is a chronic hereditary inflammatory disease that can affect both the skin and joints, and affects 2-3 % of the world’s population. It presents with red and inflamed thick skin that has flaky silver-white patches, and 60% of those who suffer from it report it to be a large problem in their everyday life. Fish oils contain the omega-3 fatty acids EPA and DHA, which are precursors to eicosanoids that have been seen to reduce inflammation. As psoriasis is an inflammatory disorder, the supplementation of fish oils is hypothesised to improve patients symptoms and therefore also their quality of life.

Objective: The aim of this paper is to review the literature and evaluate whether or not the oral supplementation of fish oils for symptom alleviation is recommended in psoriasis.

Search strategy: The literature search was conducted through the databases PubMed, Scopus and Cochrane. In Pubmed and Scopus, the keywords used were “psoriasis and fish oil”, “psoriasis and omega 3”, “psoriasis and EPA” and “psoriasis and DHA”. In Cochrane, the words “Psoriasis and fish oil” were used.

Selection criteria: The criteria were that the studies were to be randomized controlled trials conducted on humans written in English. The supplementation of fish oils should be oral and the condition should be psoriasis. No time limits when the studies were made were included.

Data collection and analysis: Three RCTs were identified in the literature search. These studies were examined using the template “Review template for randomized controlled trials” (granskningstmall för randomiserad kontrollerad prövning) and the selected outcomes were analysed according to the GRADE-system using the template “conclusive evidence form” (Sammanfattande evidensformulär). The outcomes measured were inflammation in form of erythema and coverage in form of affected area.

Main results: The outcome measures in two of the studies shows no statistic significant improvement of symptoms after the oral supplementation of fish oils. One of the studies showed a small but significant improvement in inflammation and a trend towards an improvement in the surface area affected. Both the outcome for inflammation and coverage ended up having a limited (++) evidence grade.

Conclusions: The clinical value of fish oil supplementation remains uncertain. Fish oil supplementation may possibly exert some positive effects when used in addition to established psoriatic therapies, but at present its use as an exclusive treatment is not justifiable. Both higher doses of fish oils and longer periods should be examined in double blind studies in the future.