

Abstract

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Omega-3 Fatty acids infusions as adjuvant therapy in rheumatoid arthritis.

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BACKGROUND: The present study investigated the efficacy and safety of parenteral omega-3 fatty acids (omega-3 FA) in patients with active rheumatoid arthritis (RA).

METHODS: We performed a double-blind, randomized, placebo-controlled study in 23 patients with moderate to severe RA. Patients received either 0.2 g of fish oil emulsion/kg (active) or 0.9% saline (placebo) infusion intravenously for 14 consecutive days, followed by 20 weeks of 0.05 g of fish oil/kg (active) or paraffin wax (placebo) ingested orally as capsules. A decrease in swollen and tender joint counts was the primary efficacy measure.

RESULTS: At baseline, both swollen and tender joint counts were not significantly different between patients in the treatment and placebo groups. Twenty patients completed the infusion portion of the study, and 13 completed the oral portion. Swollen joint count was significantly lower in the omega-3 FA group compared with the placebo group after 1 week of infusion ($P = .002$) as well as after 2 weeks of infusion ($P = .046$). Tender joint count also tended to be lower in the omega-3 FA group, although this did not reach statistical significance. Both swollen and tender joint counts were significantly lower in the omega-3 FA group compared with the placebo group during and at the end of oral treatment.

CONCLUSION: Our pilot study indicates that parenteral omega-3 FAs are well tolerated and improve clinical symptoms of RA. Subsequent oral administration of omega-3 FAs may prolong the beneficial effects of the infusion therapy. These results warrant validation in larger multicenter studies.

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