

#1941 - Therapeutic Effects of Omega-3 Fatty Acids on Chronic Kidney Disease-Associated Pruritus: a Literature Review

Authors and Affiliations Hamid Noshad , Tabriz university of medical sciences.

Corresponding Author and email Afshin Ghrakhani, anqarekhani@yahoo.com

Body Uremic pruritus remains one of the most tormenting, frequent and potentially disabling problem in chronic kidney disease (CKD) patients. However, an area of substantial etiological interest with relation to uremic pruritus is the essential fatty acids deficiency. So we performed a literature review to elucidate the efficacy of omega-3 fatty acids on uremic pruritus. This review evaluated all of the studies published in English language, focusing on the clinical effects of omega-3 fatty acids on uremic pruritus. The literature review was conducted in December 2015 and carried out by searching Scopus, Medline, Cochrane central register of controlled trials, and Cochrane database of systematic reviews. The search terms were "kidney injury", "kidney failure", "chronic kidney disease", "end-stage renal disease", "dialysis", "hemodialysis", "peritoneal dialysis", "pruritus", "itch", "skin problems", "fish oil", "omega 3", "n-3 fatty acids", "polyunsaturated fatty acids", "docosahexaenoic acid", and "eicosapentaenoic acid". Four small studies investigating potential benefits of omega-3 fatty acids on symptoms of uremic pruritus were found. Among them, three small randomized controlled trials have shown a significant improvement in pruritus symptoms (evaluated by a standard questionnaire) in CKD patients who took omega-3 supplement compared to omega-6, omega-9, and placebo supplementation. Despite numerous limitations of the studies, it is worth noting that even minor reduction in itching symptoms may be clinically significant for CKD patients. Therefore, and considering multiple health benefits of omega-3 fatty acids in advanced CKD and negligible risk profile, omega-3 intake can wisely be applied to CKD patients with uremic pruritus.

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