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INTRODUCTION AND OBJECTIVES:

One of the mechanisms that induce inflammation in psoriasis depends on cyclooxygenase 2 enzyme activity. This enzyme is produced during the inflammatory response and acts on polyunsaturated fatty acids, leading to formation of cell signaling molecules, like prostaglandins, thromboxanes, leukotrienes. When cyclooxygenase 2 acts on arachidonic acid, which is an omega-6 fatty acid, it produces prostaglandins E2, with pro inflammatory and proliferative action in most tissues. However, when there is a bigger contribution of omega-3 essential fatty acids, specially eicosapentaenoic acid and docosapentaenoic acid, they become the main substrates of the enzymatic reaction, producing eicosanoids without inflammatory activity. The purpose of this study is to demonstrate the effects of phospholipids rich in omega-3 polyunsaturated fatty acids in psoriasis, through objective analyzes of PASI and BSA reduction.

MATERIALS AND METHODS:

Thirty patients between 28 and 70 years of age were evaluated with psoriasis vulgaris. PASI and BSA were calculated and photographic register was made at the beginning and after 60 days of treatment using 400 mg daily of phospholipids rich in omega-3 polyunsaturated fatty acids.

RESULTS:

Mean reduction in PASI was 52%. It was expressed, specially, by the reduction of the erythema and the infiltration. The BSA reduction was less pronounced (41%). In addition, there was important reduction of the subjective symptoms reported by the patients, mainly itching.

CONCLUSIONS:

This study shows that omega-3 polyunsaturated fatty acids administration, reducing the proportion of omega-6/omega-3, can divert the enzymatic activity of cyclooxygenase 2 for the main degradation of omega-3 fatty acids, producing eicosanoids without inflammatory activity and, consequently, reducing the inflammatory manifestations. It is assumed that it is only an adjunct therapeutic modality, with the purpose of adding benefits to the already established treatments of the disease.

