Abstract

Introduction: Atopic dermatitis (AD) is a disease that mainly affects the pediatric population involving chronic and repetitive inflammatory skin manifestations. Its evolution is known as atopic march, which is characterized by the occurrence of respiratory and food allergies. Aim: To carry out a classical review of the state-of-the-art scientific literature regarding the effect of probiotics on the treatment of children with AD. Methods: Searches were conducted in Medline and Lilacs through the portals PubMed (http://www.ncbi.nlm.nih.gov/pubmed/) and SciELO (http://www.scielo.br). There was a selection of the available publications in the period from 2001 to 2011, using the keywords atopic dermatitis and probiotics (in English and in Portuguese). Results: After applying the inclusion and exclusion criterias, we selected 12 case-control studies which were conducted in four European countries and Australia. The methodological quality of the studies was assessed according to the STROBE recommendations. Assessment of agreement among researches in classifying the quality of the articles showed excellent agreement (k = 1.00, 95%) with a total of 9 papers at B level. The majority of the studies (75%) indicated a beneficial biological effect of probiotics on AD, including protection against infections, enhancement of the immune response, inflammation reduction and changes in gut flora. The remaining studies showed no beneficial effects according to the outcomes of interest. Conclusion: The majority of the studies in the scientific literature in this review showed improvements in some inflammatory parameters and in intestinal microbiota and not exactly, changes in clinical parameters. However, the biological effects observed in most of them suggest the possibility of benefits of the use of probiotics as an adjuvant in the treatment of AD.

Keywords
Atopic dermatitis. Allergy. Probiotics.