

INTRODUCTION

Atopic dermatitis (AD) is a common, chronic or chronically relapsing, inflammatory dermatosis that often presents in early childhood and may continue on into later life. Usually occurring in a personal or family setting of atopy, it is considered an immune-mediated condition with a predominance of CD4+LT2 helper lymphocytes, hyper-stimulatory high affinity IgE receptor (FceRI) expressing Langerhans cells, macrophages, and inflammatory dendritic epidermal cells, as well as effector cells such as eosinophils and mast cells. In addition, patients with AD have abnormal skin barrier function and epidermal lipid abnormalities⁽¹⁾.

The management of AD in childhood is challenging. Administration of topical corticosteroids might control the symptoms, especially in children with mild and moderate eczema. However, relapses are common. Moreover, extensive and prolonged use of corticosteroids implies a risk of systemic side effects and can cause skin atrophy⁽²⁾.

Atopic dermatitis (AD) is frequently the first manifestation of atopic disease in infancy, causes enormous physical discomfort, and imposes huge demands on family time and resources. This has highlighted the need for novel strategies to reduce the burden of disease⁽³⁾.

There has been speculation that the recent rise in allergic diseases (including AD) may be linked to reduced bacterial encounter in progressively cleaner environments⁽⁴⁾.

Growing concern over the adverse immunologic effects of progressively more hygienic environments has led to enormous interest in the role of microbial products such as probiotics in the prevention and treatment of allergic disease⁽⁵⁾.

Probiotics are live microorganisms that when ingested might have a positive effect in the prevention or treatment of a specific pathologic condition. Recently, a role for oral bacteriotherapy in the prevention of atopic dermatitis (AD) was demonstrated. Because allergic immune responses manifest early in life, there has been obvious interest in the potential benefits of modifying the gastrointestinal flora by using probiotic supplementation⁽⁶⁾.