中文題目：以 Dupilumab 成功治療患有嚴重異位性皮膚炎的同卵雙生子

英文題目：Homozygous twin children with severe atopic dermatitis successfully treated with Dupilumab

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Introduction

Atopic dermatitis (AD) is among the most common inflammatory skin diseases affecting both children and adults. With Dupilumab, the debilitating and intense pruritic rash which severely impaired quality of life in patients with AD can be dramatically improved.

Materials and Methods

A pair of homozygous twins with past history of allergic rhinitis were born at GA 35 weeks. They were initially diagnosed with AD at the age of 1 year old. At the age of 5 years old, they presented with persistent itchy rash with scaly crust and foul odor, affecting their elbows, knees which later also involve their whole body, including the trunk and face. They have been hospitalized multiple times due to AD flare up with secondary infection, treated with hydrocortisone, diphenhydramine and cefazolin. Multiple allergen tests were done, they have tried to eliminate mites and avoid milk but in vain. Cyclosporin, aggressive moisturizing and omalizumab failed to treat their rash. Since receiving Dupilumab injection, the twin has experienced profound improvement in their skin. As their AD became under control, they no longer scratch constantly, experience difficulty in sleeping nor felt outcasted by the children in school.

Discussion

This homozygous twin has shown us the importance of genetic factor in the epidemiology of AD. IL-4 and IL-13 are pivotal in TH2-mediated inflammation, production of inflammatory cytokines and skin changes in AD. Dupilumab targets the IL-4 receptor alpha-chain subunit common to IL-4 and IL-13 receptors. By downregulating inflammatory mediators and upregulating genes involved in skin barrier function, Dupilumab has contributed potentially to skin normalization and thus revolutionized the treatment of AD.

References:

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