STUDENTS' CORNER
LETTER TO THE EDITOR

Effectiveness of treatment of tralokinumab in treatment of atopic dermatitis in adolescents

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Respected Madam, Atopic dermatitis (AD) is a prevalent inflammatory skin condition that affects people of all ages and can cause significant distress based on the severity of the condition. Researchers have examined focussed therapies that rely on a better understanding of the underlying pathophysiology of AD. While some therapies that target specific molecules, such as IL-13, IL-31, and OX40 (CD134), have been assessed, there is still much to be done regarding narrow-acting agents which act on a single molecule only.[1] Tralokinumab, targeting interleukin-13 in patients with moderate-to-severe atopic dermatitis, was found to be an effective treatment hence beneficial in enhancing health-related quality of life (QoL) in adults.[2]

Paller et al. recently conducted a clinical trial focussing on adolescents (aged 12-17) with moderate to severe atopic dermatitis, finding that tralokinumab was both effective and safe, showcasing its potential as a treatment option for the said age group.[3] Tralokinumab is a fully human monoclonal immunoglobulin G4 antibody that binds with remarkable affinity to the IL-13 cytokine, blocking its interaction with the IL-13 receptor and thus preventing downstream signalling and its ensuing inflammatory effects.[4]

Atopic dermatitis can be treated with the use of Janus Kinase inhibitors; however, these treatments have shown to result in unexpected adverse effects (AEs) due to the interaction of unintended pathways as well as the target ones; the most common being acne.[5] Dupilumab, another therapeutic agent for atopic dermatitis, has been observed to cause conjunctivitis in adolescent patients.

The study revealed that Tralokinumab (150mg/300mg) demonstrated to be an effectual treatment for atopic dermatitis, as the primary and secondary endpoints of the trial between Tralokinumab and placebo were statistically significant ($p<0.05$) while the frequency of conjunctivitis in adolescents was numerically lower than that reported with Dupilumab and the frequency of acne was numerically lower than that reported with Janus kinase inhibitors.

As safe and efficient treatment of acute dermatitis for adolescents is already limited, Tralokinumab's narrow focus on IL-13 molecule provides a more precise approach to treat atopic dermatitis in adolescents with fewer complications. Hence, it is imperative to look into this discovery for more effective treatment of the disease.

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