

Intranasal triamcinolone acetonide effectively improves nasal symptoms and quality of life in patients with perennial allergic rhinitis

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Allergic rhinitis is a common problem with increasing prevalence. Two recent publications demonstrate that intranasal triamcinolone acetonide is an effective treatment that progressively improves nasal symptoms and quality of life in adult patients with perennial allergic rhinitis.

A llergic rhinitis (AR) is an inflammatory disorder of the nasal mucosa affecting up to 40% of the general population worldwide. It can be either seasonal or perennial and is clinically defined by four classic symptoms including itching, sneezing, rhinorrhea, and nasal congestion [1]. The pathophysiology of AR is a multifactorial, including genetic predisposition, immunological response, and environmental pollutants as causal factors. AR symptoms can impair quality of life and wellbeing and cause sleep disruption, absenteeism and decreased work productivity. The relief of AR symptoms can be assessed by validated scores such as the reflective Total Nasal Symptom Score (rTNSS).

Intranasal corticosteroids are considered to be the most effective form of treatment for AR symptoms. A double-blind, parallel-group, phase III clinical trial randomized a total of 260 patients with persistent perennial AR to receive intranasal triamcinolone acetonide (220 μ g per day as two 55 μ g sprays in each nostril) or fluticasone propionate (200 μ g per day as two 50 μ g sprays in each nostril) for 28 days and found that both treatments were effective in decreasing rTNSS values [2]. Two recent publications have reported a post-hoc analysis of efficacy [3] and quality of life (QoL) [4] over the 28 day course with both treatments.

The post hoc efficacy publication assessed weekly changes in rTNSS for the total score (range: 0–16) and each of its four components and the proportion of patients reporting at least a 50% or 75% reduction in symptoms [3]. Both total score (**Fig. 1**) and individual symptom scores for sneezing, nasal itching, rhinorrhea and nasal obstruction progressively declined over time; such symptom improvement was statistically significant at each time point with both treatments. Triamcinolone showed continuous and consistent improvement in total rTNSS scores and for individual symptoms through the 4 weeks treatment period.

The second study examined weekly QoL changes using the Rhinoconjunctivitis Qualify of Life questionnaire (miniRQLQ) [4]. Both treatments significantly improved the miniRQLQ scores, both overall and the five individual domains, including activity limitations and practical problems. Similar to symptom improvement, there was progressive improvement over time that was statistically significant at each weekly time points over the 4 weeks treatment period (**Fig. 2**).

In conclusion, intranasal triamcinolone demonstrated to be an effective treatment for adults with perennial AR that continuously and consistently improved nasal symptoms, as well as quality of life measures and was well tolerated over the 4 weeks of treatment.

Literature

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Fig. 1. Least square change from baseline in total rTNSS in the per protocol population. Reproduced with permission from [3] rTNSS = reflective Total Nasal Symptom Score; TAA = triamcinolone acetonide; FP = fluticasone propionate



Fig. 2. Least square mean changes in overall miniRQLQ. Reproduced with permission from [4].

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