

# The Impact of Sublingual Immunotherapy on Quality of Life in Allergy Rhinitis Patients

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February 8, 2021

## Abstract

**Introduction:** Immunotherapy has proven its efficacy in multiple randomized control trials (RCT) in treating allergic rhinitis (AR) as it induces long term remission after discontinuation and prevent new sensitization. **Objective:** Our aim is to look into earliest improvement of quality of life (QOL) in AR patient treated with Sublingual immunotherapy (SLIT). **Methodology:** Patients who were sensitized to dust mites (*Dermatophagoides farinae*, *Dermatophagoides pteronyssinus* and *Blomia tropicalis*) were enrolled into the study. All patients were treated with SLIT for 6 months. The patients were assessed using rhinoconjunctivitis quality of life questionnaires (RQLQ) and peak nasal inspiratory flow (PNIF) pre-treatment at 1, 3 and 6 months post SLIT. The usage of intranasal corticosteroids (INS) and antihistamine were documented in medication diary. The data for pre and post treatment for RQLQ results were analysed using paired T-test and medication diary were analysed using ANOVA test. **Results:** A total of 53 patients were enrolled in the study. The mean RQLQ score showed significant result at 3 and 6 months post SLIT ( $p < 0.05$ ). Significant improvement seen in the mean PNIF value pre-treatment (81.54 L/min  $\pm$  29.36 ) compared to mean PNIF value at 3 months (92.0L/min  $\pm$  29.03 ) and 6 months (96.13L/min  $\pm$  26.67) post SLIT ( $p < 0.05$ ). The dependency of patients towards pharmacotherapy also showed a significant reduction at 3 and 6 months post SLIT ( $p < 0.05$ ). **Conclusion:** Our study showed a significant improvement of patients' quality of life as early as 3 months of post SLIT treatment.

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Dr. Salina Husain Department of Otorhinolaryngology Head and Neck Surgery National University of Malaysia Medical Centre Jalan Yaacob Latiff, Bandar Tun Razak 56000, Cheras, Kuala Lumpur 29<sup>th</sup> JANUARY 2021 Dear Doctor, *TITLE: The Impact of Sublingual Immunotherapy on Quality of Life in Allergy Rhinitis Patients* I have submitted the above titled original article manuscript for review with hope that it will receive due consideration for publication in your esteemed journal.

1. The work conducted and presented in this manuscript has not been published or submitted for publication in another journal. All authors named in the manuscript have made substantial contribution each to qualify for authorship and have approved of the content of the manuscript. We have no financial support for our work and other potential conflicts of interests.

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3. The authors declare that there is no actual or potential competing interest for this article. The corresponding author on behalf of all authors is prepared to take responsibility for the integrity of the content of the manuscript. The authors confirm that they have reviewed and approved the final version of the manuscript.

Thank you. Yours Sincerely,

(PROFESSOR DR SALINA HUSAIN)





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