

SHORT REPORT – EVALUATION OF IMMUNOTHERAPY FOR SEASONAL AND PERENNIAL ALLERGIC RHINITIS USING QUALITY OF LIFE QUESTIONNAIRES

H Hasan, MD, FRCS (Edin)

A Toerien, RN

PC Potter, MD, FCP(SA), DCH(SA), FAAAAI

Allergy Diagnostic & Clinical Research Unit, UCT Lung Institute, Cape Town

INTRODUCTION

Allergic rhinitis is a common illness affecting an estimated 20% of children in South Africa and as many as 30% of the adult population.¹ Its symptoms can have detrimental effects on the physical, psychological and social aspects of patients' lives and on their productivity. Different therapeutic modalities have been advocated, ranging from simple, though frequently impractical, measures like allergen avoidance to medications such as systemic steroids. Medication is never free of side-effects and at times is of no beneficial value, particularly in severe cases. Immunotherapy is a potentially effective treatment. Results from immunotherapy have previously not been satisfactory because of poor patient selection and crude vaccines or poor techniques of administration.¹

Twelve patients with severe allergic rhinitis undergoing immunotherapy in the Allergy Diagnostic and Clinical Research Unit of the UCT Lung Institute, between June 1999 and September 2001, were evaluated by means of a Health Related Quality of Life Questionnaire (HRQLQ). Our QLQ was designed to encompass the following seven aspects of patients' quality of life: sleep, non-hayfever symptoms, emotional problems, practical difficulties, nasal problems, eye symptoms and activities limited by the allergy.

METHODOLOGY

The HRQLQ was completed by each of the 12 patients participating in the study at the commencement of treatment and at the last clinic visit. Questions in each of the seven categories were answered using a score from 0 to 6, where 0 indicated no problem and 6 represented the worst severity. An average was obtained for each category, and an average total for each visit was calculated from the overall average for all the categories.

RESULTS

The average age of patients was 30 years (range 5-50 years). Males (58%) constituted the majority. Half of our target sample were found to be allergic to grass mix as tested by skin-prick testing, while 41% reacted to house-dust mite (HDM). Seventy-five per cent were undergoing subcutaneous immunotherapy (SIT) while the remainder were receiving sublingual immunotherapy (SLIT). Half of the group completed more than 18 months of therapy, and half received immunotherapy for 6-12 months. Fifty-eight per cent were found to have other comorbid allergic profiles. In terms of reactions to immunotherapy 75% never experienced any reactions, while 25% experienced minor reactions.

On correlating the total average symptom score for

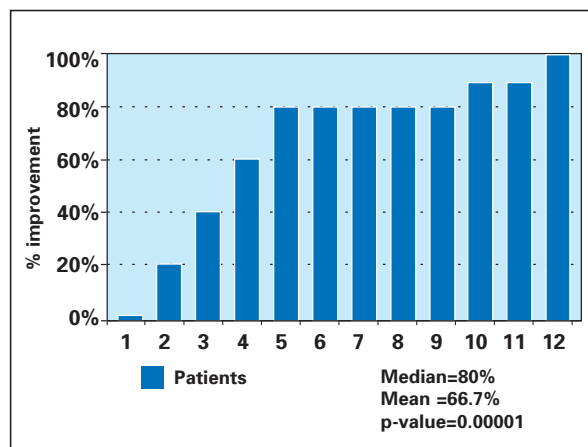


Fig. 1. Percentage improvement of worst symptom for each patient.

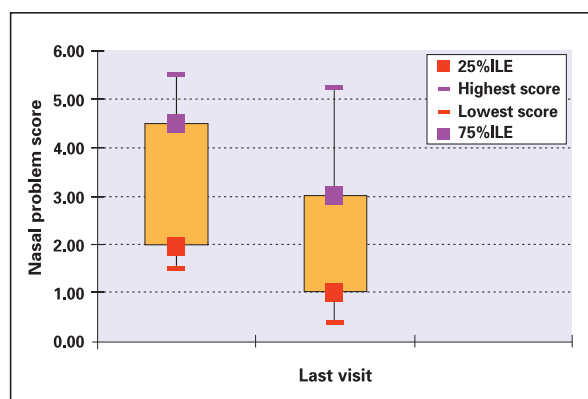


Fig. 2. Comparison of nasal problem average as measured for first and last visit.

each patient over two visits (Fig. 1), improvement was found to be at a level of statistical significance ($p = 0.0365$). An improvement indicator was calculated from the difference of the two total averages and showed a significant improvement. On comparing the average limitation of activity, an improvement as reflected by the median for each visit was found to approach a level of significance ($p = 0.07$). The boxplot (Fig. 2) illustrates clearly the strong tendency for improvement on comparing the nasal complaint average in each visit; the boxes represent the quartiles where 50% of the scores lie. A significant improvement was noted by the drop in the median from 3 to 2 and by the p value (0.0579).

There was a noticeable drop in the need for anti-allergic medications as more than 50% became occasional users or stopped using treatment. Patients were asked to state a percentage improvement of their worst presenting symptom, and 66% of them had at least 80% improvement.

A satisfaction indicator was calculated by obtaining the score sum for the following two questions: Would you recommend immunotherapy and would you undergo a second course of immunotherapy? At least 75% indi-

Correspondence: Mr H Hasan, email: heshambdf@hotmail.com

cated that they were strongly satisfied.

Patient assessment of the comparison of the amount of money spent on both conventional anti-allergic medications and immunotherapy indicated that 50% thought that immunotherapy was cost-effective.

DISCUSSION AND CONCLUSION

Our preliminary prospective study of the effectiveness of immunotherapy in cases of severe allergic rhinitis has found the HRQLQ to be a reliable tool to evaluate the therapeutic outcome from the patient's perspective. It also focuses on the patients' perception of their disease and measures the impairments that have significant impact on a given patient. This is especially relevant as symptoms may vary in their effect on different patients.²

The commonest allergen was found to be grass pollen. Although none of the patients had completed their immunotherapy course at the time the study was done, they showed quite promising early and statistically significant improvement in their quality of life as reflected by the total average limitation of activity, nasal complaint score and the reduced dependency on anti-allergic medications. Additionally, patients indicated their satisfaction with this modality, and found that their worst presenting symptom improved dramatically. At least half of them thought that the therapy was cost-effective. This percentage is quite likely to increase when cost of immunotherapy ceases on completion of therapy and the patients are desensitised to the allergens causing their symptoms.

This evaluation of patients receiving immunotherapy has found that it is an effective modality for the treatment of rhinitis even before completion of the course. The HRQLQ has been useful in evaluating the utility of immunotherapy.

REFERENCES

1. Weinberg EG. Chapter 17: Allergen Immunotherapy *The ALLSA Handbook of Practical Allergy*, 2nd ed. Cape Town: ALLSA, 2001: 206-211.
2. Meltzer EO. Quality of life in adults and children with allergic rhinitis. *Allergy Clin Immunol* 2001; **108**: 45-53.

PRODUCT NEWS

FDA APPROVES ZYRTEC FOR CHILDREN 6 MONTHS OF AGE

The United States Food & Drug Administration has approved the use of Zyrtec (cetirizine hydrochloride) in children from the age of 6 months and older.

Indicated for the relief of symptoms associated with perennial allergic rhinitis and for the treatment of the uncomplicated skin manifestations of chronic idiopathic urticaria, the dosage recommended is 2.5 mg (1/2 teaspoon) once daily.

Information on file at UCB (SA) (Pty) Ltd.



PHARMACEUTICAL SECTOR

PRODUCT NEWS

ACCOLATE®
zafirlukast

NEW ORAL TREATMENT FOR ASTHMA SUFFERERS

AstraZeneca's respiratory division now offers the 'A - Z' in asthma management

AstraZeneca Pharmaceuticals recently announced the launch of Accolate®, a new oral formulation leukotriene receptor antagonist (LTRA) approved for the prevention and ongoing treatment of asthma in adults and children over 12 years of age.

Accolate® was the first LTRA to be registered for use in the USA and is now approved for use in 60 countries. It comes in a convenient tablet form taken twice daily, and blocks the effects of substances that cause the constriction of the airways, build up of mucus in the lungs and inflammation of the breathing passages. It has also proved to be

very effective in treating asthma sufferers whose symptoms are triggered by allergens like cats, house dust mites, pollen, the sulphur dioxide present in polluted air, alcohol and others.

Professor Eugene Weinberg head of the Allergy Clinic at the Red Cross Children's Hospital in Cape Town, says that he expects the AstraZeneca LTRA to do well in South Africa. Quality of life studies undertaken with the medication in adolescents here in South Africa, have revealed an 'immense improvement' in their quality of life, according to the professor.

With the introduction of the new LTRA, AstraZeneca becomes the only pharmaceutical company in South Africa to be able to provide asthma sufferers and their treating doctors with a complete range of treatments for the disease. Indeed, according to product manager, Anton Esterhuysen, AstraZeneca now offers the complete 'A to Z' in asthma management, allowing doctors many more treatment options in managing a variable disease, that requires fast, adjustable, symptom-driven asthma control.

For further information about the AstraZeneca asthma range please contact Anton Esterhuysen (Respiratory Product Manager): (011) 797 6000