

# Seasonal Allergic Rhinitis: An Evaluation of Symptomatology and Medication Use During Ragweed Season



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## Introduction

Although many anti-allergic medications are prescribed for daily use in seasonal allergic rhinitis (SAR), actual usage is unknown and not well documented in the medical literature.

Anecdotal clinical evidence indicates that a significant proportion of patients with SAR actually use their medications on an 'as needed' rather than regular basis.

In Canada, most antihistamines, decongestants, and combination products are available over-the-counter (OTC), whereas nasal corticosteroids are prescribed. We are uncertain how the availability of OTC versus prescribed medication affects utilization patterns, and what specific factors influence personal choice.

A randomized controlled trial over 2-4 weeks in season is the standard for determining medication efficacy in SAR. If a significant proportion of patients are using their medication on an "as needed" basis, short term studies to evaluate anti-allergic medications for efficacy measures such as onset of action and duration of effect are particularly relevant.

## Objective

This study aimed to document actual usage of anti-allergic medications during ragweed season in known-ragweed allergic subjects; including class of medication, frequency of use, usage patterns and reasons for choice of medications, and prevalence of SAR symptoms.

## Methods

### Survey Development:

A survey to document nature and severity of SAR symptoms in ragweed season, in addition to medications used by subjects with SAR, the patterns of use (i.e. daily, PRN, never), and the factors affecting choice of medication was developed in consultation with the Department of Psychology at Queen's University (Kingston, Ontario).

During the third week of ragweed season (mid-September 2003), the survey was mailed to 1821 subjects on file with documented ragweed allergy who had either participated in at least one allergy clinical trial or agreed to be contacted for future research opportunities.

### Statistical Analysis

All respondents were evaluated with descriptive statistics only.

## Results

- 550 of the 1821 subjects completed and returned the survey, for a response rate of 30%
- Medications were mostly taken intermittently rather than daily (antihistamines 68.0% of users; nasal corticosteroids 71.8% of users)

Figure 1: Usage Patterns for Common Anti-Allergic Medications

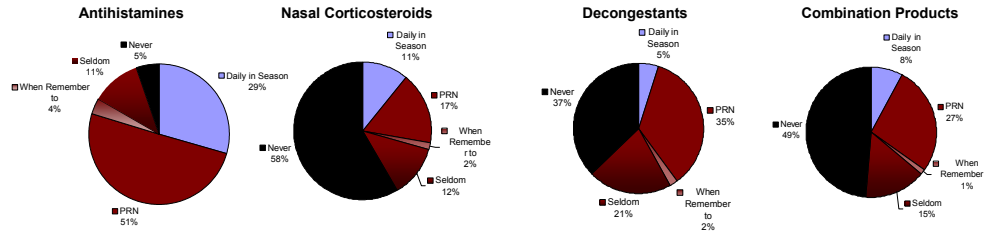


Figure 2: Importance of Various Factors in Selection of Anti-Allergic Medications

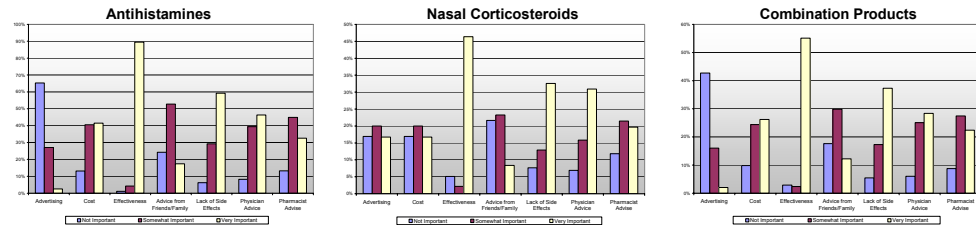
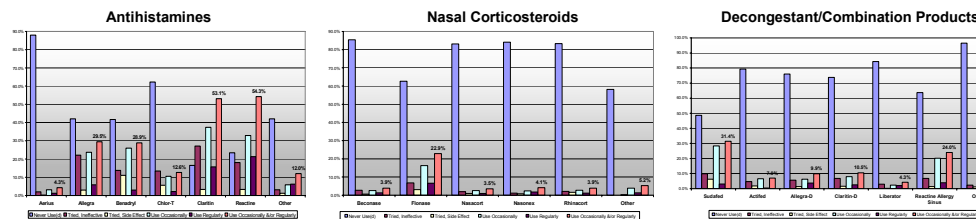


Figure 3: Use of Specific Products\*

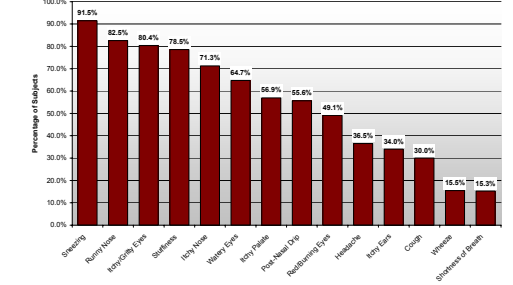


\* Trade names used for sake of brevity

- Rates of medications used by SAR patients were:
  - antihistamines - 94.7%
  - decongestants - 63.1%
  - combination (antihistamine/decongestant) products - 52.0%
  - intranasal corticosteroids - 42.5%
- Efficacy and side effect profile consistently rate very important in choice of medication

## Results - continued

Figure 4: Percentage of patients reporting various symptoms of SAR



## Discussion

- SAR patients tend to use their anti-allergic medication on an intermittent basis, rather than on a regular basis
- This applies to medications normally prescribed for regular use (i.e. nasal corticosteroids)
- Self-reported reasons for choosing one OTC product over another were (in decreasing order of importance): Efficacy, Side Effect Profile, Physician Advice, and Cost
- Self-reported reasons for choosing one nasal corticosteroid over another, however, were slightly different, with a rank order of: Efficacy, Physician Advice, Side Effect Profile and Pharmacist Advice

## Conclusions

- SAR patients tend to use their anti-allergic medications intermittently rather than regularly, giving relevance to short term studies
- Efficacy and fewer side effects were rated more important than physician advice and cost when choosing an anti-allergic treatment