

Trends in Oral Allergy Syndrome in Adults with Allergic Rhinitis 1996-2007

Dr Raymond J Mullins. Suite 1, John James Medical Centre. 175 Strickland Crescent, Deakin ACT 2600.

Tel 02-62822689; Fax 02-62822526; email rmullins@allergycapital.com.au



INTRODUCTION

Some patients with seasonal allergic rhinitis and conjunctivitis develop itch and irritation of the tongue, mouth and throat after ingestion of some fresh fruits and vegetables, a condition known as Oral Allergy Syndrome (**OAS**) and food-pollen syndrome.

Most patients are sensitized to cross-reactive allergens common to some pollens and foods. While generally a benign disorder, angioedema and sometimes anaphylaxis occurs. Cross-reactivity between food and pollen allergens may be also the explanation for some cases of anaphylaxis (1, 2).

RATIONALE

An increase in referrals for evaluation of systemic food allergy (**FA**) over the last 12 years led to an examination of whether this food allergy-related syndrome might also be increasing.



STUDY POPULATION

All patients aged 15 - 60 years referred 1996 - 2007.

METHODOLOGY

Diagnostic and demographic data were entered into Microsoft Access

and analysed retrospectively. Prospectively collected data from pre-consultation questionnaires were also recorded. Questionnaires specifically asked about the presence or absence of **OAS** related symptoms.

Data were analysed by examining all patients with a diagnosis of active allergic rhinitis (**AR**) aged 15 - 60 years. Patients with non-allergic rhinitis (**NAR**) were the comparator group.

RESULTS

4801 patients (61.6% female) were diagnosed with active AR and 1303 (70% female) with NAR.

Time Trends

- * OAS was the primary reason for referral in < 5% of patients.
- * Complaints of OAS in those with AR doubled from 10 to 23% (cf: 2.6 to 5 % in those with NAR (data not shown)).
- * When patients with co-existent **FA** were removed from analysis, the trend for increased OAS over time disappeared (**Figure 1**).

Age and gender

- * There was no age difference in those with OAS compared to those without (mean: 34 years).
- * Most with OAS were female (72 %).

Co-morbidity in AR patients

Whereas the proportion of AR patients with co-existent asthma & eczema did not change, there was a significant increase in patients with **FA** and

anaphylaxis (**Fig 2**). The trigger for systemic FA was fruit/vegetables in only 20% of cases.

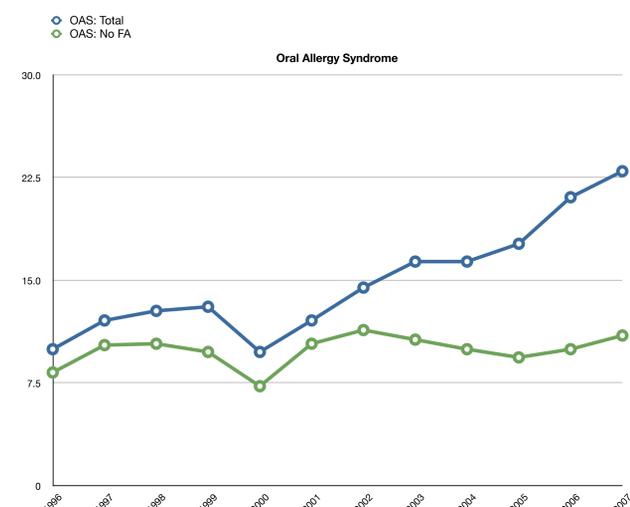


Figure 1: The proportion of patients (%) with allergic rhinitis and oral allergy syndrome (all patients and subpopulation without co-morbid food allergy)

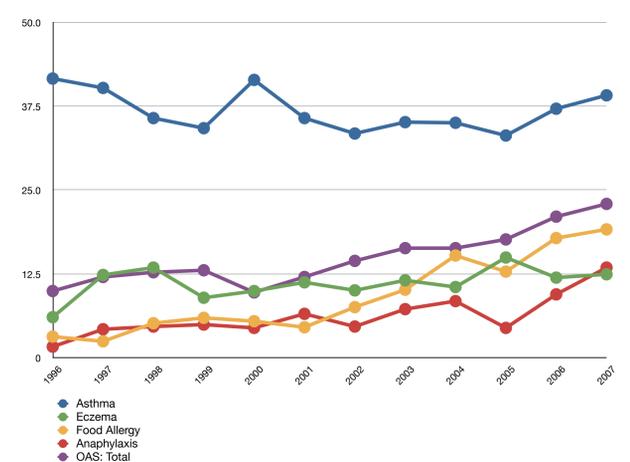


Figure 2. Allergic rhinitis co-morbidity (%). Only OAS, FA & anaphylaxis increased over time.

DISCUSSION

The increase in OAS disappeared when those with FA were removed from analysis (**Figure 1**). It remains uncertain whether the increase in OAS in AR patients was a true increase, or an artifact of increasing referrals for evaluation of FA which trebled over the same period in this age group.

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