



Long-term adherence to imported fire ant subcutaneous immunotherapy

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Disclosures

- None
- The views expressed are those of the presenters and do not reflect the official views or policy of the Department of Defense or its components



Introduction

- Imported fire ant (IFA) subcutaneous immunotherapy is both safe and effective¹
- For optimal protection, IFA SCIT is recommended for 3 to 5 years²
- No study has been completed to evaluate long-term adherence to IFA SCIT beyond one year duration

¹Freeman et al. *J Allergy Clin Immunol.* 1992;90:210-215.

²Stokes et al. *Ann Allergy Asthma Immunol.* 2002;88:391-394.

Objective

- Evaluate SCIT adherence to the recommended 3-year minimum course in IFA allergic patients in an endemic area

Methods

- Study was IRB approved
- Between the years 2007-2014, adults and children with systemic reactions to IFA were prospectively enrolled for a study on the natural history of IFA allergy
- Subjects were contacted annually for interval SCIT adherence
- Analyzed:
 - Population demographics
 - Method of SCIT initiation
 - RUSH
 - Conventional
 - SCIT adherence rates

Methods

- Inclusion Criteria
 - Detectable IFA specific IgE via skin testing or serology
 - Patient had indication for IFA SCIT
 - IFA SCIT was recommended by an allergist
 - Patient agreed to proceed with SCIT

Methods

- Exclusion Criteria
 - Declined SCIT initiation
 - Undergoing SCIT intervention from alternative study

Results

Characteristics	No (%)
Total IFA allergic patients	123
Male	41 (45%)
Female	51 (55%)
Average Age	27yo (range 2-75)
Children (<17yo)	20 (22%)
Adults (>= 17yo)	72 (78%)
Asthma	26 (28%)
B-blocker use	0
ACE inhibitor use	5 (5%)
Grade 2 initial reaction	11 (12%)
Grade 3 initial reaction	69 (75%)
Grade 4 initial reaction	12 (13%)

Results

Characteristics	No (%)
Total IFA allergic patients	123
IFA SCIT not indicated/offered	17
IFA SCIT initiation recommended	106
Declined IFA SCIT	14
IFA SCIT initiated	92 (87%)
RUSH to IFA SCIT	63 (68%)

Results

Characteristics	No (%)
Total Adherence at 1 year	64(70%)
Total Adherence for 2 consecutive years	31 (34%)
Total Adherence for 3 consecutive years	21 (23%)
SCIT at 4 years	11 (11%)
SCIT at 5 years	5 (4%)

Conclusion

- A 3-5 year course of IFA SCIT provides long-lasting protection against IFA-triggered anaphylaxis
- Despite this, only 23% adhered to the recommendation to complete a minimum 3-year consecutive course.
- Logistical constraints and fear were significant impediments.

Questions?