

Rationale

- Peanut allergy has become an important health issue. It can be the cause of severe reactions triggering significant anxiety for the allergic individual especially with regards to the risk of accidental exposures.
- Peanut Oral Immunotherapy (POIT) is a recent developed treatment approach that has been shown to be effective in multiple research studies and has been associated with an acceptable safety profile. This treatment modality has just become available with FDA approval.

Methods

- The aim of our study was to obtain an accurate assessment of goals of treatment as well as concerns and barriers from families considering POIT in either the research or clinical setting.
- Patients were recruited from the allergy clinics at Texas Children's hospital. Parents of peanut – allergic children who expressed an interest on POIT were offered the opportunity to undergo a separate consultation dedicated to discussing POIT only.
- Families of current ongoing research trial children were excluded from participation as well as children with a diagnosis of eosinophilic esophagitis, underlying immune deficiencies, uncontrolled asthma, severe allergic rhinitis, uncontrolled spontaneous urticaria and severe atopic dermatitis.
- A single allergist (AA) met with the interested families and conducted semi-structured interviews on POIT. Families were provided with standardized written information on POIT prior to consultation. The collected information was scribed by a second allergist (ACB) and later analyzed with identification of common topics that emerged from the discussions with 92 consecutive families' consultations on POIT conducted over a period of 1 year.
- This study was approved by the Institutional Research Board committee at Baylor College of Medicine.

Results

	Median: 8	IQR: 5.75-10
AGE OF COHORT (in years)	Median: 8	IQR: 5.75-10
AGE AT INDEX REACTION (in years)	Median: 1.5	IQR: 1-2.25
Recent peanut SPT (measured in mm) *	Median: 14	IQR: 10-20
	N=92	%
GENDER		
Male	50	54
Female	42	46
RACE & ETHNICITY		
White non-Hispanic	63	68
Asian non-Hispanic	17	18
White-Hispanic	3	3
Black non-Hispanic	3	3
Asian-Hispanic	1	1
Unrecorded	5	5
FAMILY HISTORY OF ATOPY		
Positive	78	85
Negative	13	14
Unrecorded	1	1
ATOPIC CO-MORBIDITIES		
Allergic Rhinitis	78	85
Other food allergies	72	78
Atopic dermatitis	71	77
Asthma	41	45
INDEX REACTION TO PEANUT		
Positive index reaction to peanut	73	79
Never ingested	19	21
BODY SYSTEMS INVOLVED IN THE INDEX REACTION	N=73**	%
Cutaneous	43	59
Cutaneous + Gastrointestinal	11	15
Cutaneous + Respiratory	7	9
Cutaneous + GI + Respiratory	5	7
Gastrointestinal	5	7
Respiratory	2	3
TREATMENT RECEIVED FOR INDEX REACTION TO PEANUT		
Oral antihistamines	53	73
IM Epinephrine	8	11
Albuterol	3	4
Oral steroids	4	9

COMMON QUESTIONS FROM FAMILIES CONSIDERING POIT BY TOPIC

Topic	Questions	Answers
Practical Information	How long is the whole process going to take?	How successful is POIT?
	What is the longest time needed to reach maintenance?	If my child has a high specific IgE level to peanut, will it be more difficult to achieve desensitization?
	How long does an up dosing visit last?	Is there a better age to start OIT?
	Does my child need to have a peanut challenge before POIT?	Is there a potential cross desensitization between peanuts/tree nuts?
	How often will blood work be done?	Is my child going to be cured from his/her peanut allergy?
	How are the daily dosages going to be offered?	Do we still need to carry an epinephrine auto-injector after reaching maintenance?
	What if the daily dosage is skipped or forgotten?	Does it make a difference being only allergic to peanut or having multiple food allergies?
	What happens if my child is ill during POIT?	We want our child to be protected from severe reactions
	My child takes a daily antihistamine for nasal allergies, is it possible to continue this during POIT?	I want her/him to be able to go to parties without worrying
	Is it possible to change the schedule of the daily doses to earlier or later that day if needed?	When he goes to college, I want him to be protected from accidental reactions to peanut
Safety	After the daily dosage of POIT, does my child need to be sitting completely still during the no-exercise period?	When we reach maintenance, is it possible to proceed to higher doses so peanut can be freely introduced in the diet?
	Can my child walk to school/ride their bike during the 2-hour observation period?	What are the reasons to be declined the option of POIT?
	Is the peanut flour taste unpleasant?	My child is currently in another IT treatment, is he/she eligible for POIT?
	How safe is POIT?	If an allergic reaction happens that requires the use of epinephrine, does it mean my child needs to discontinue POIT?
	What is the percentage of reactions during POIT?	Are children with all levels of specific IgE to peanut included?
	What are the most common reactions?	Why does my child need to have his/her asthma, allergic rhinitis and eczema controlled before the start?
	How often does anaphylaxis happen during POIT?	In your opinion, what is the best decision?
	Do reactions happen mostly during up dosing visits or at home?	What would you do if she/he was your child?
	What do we do if a reaction happens at home?	Is there a number to call if any reactions happen or if I have any questions?
	If my child stops POIT for some reason, will this make his peanut allergy worse?	Lack of insurance coverage
Efficacy	How frequent is EoE during POIT?	Time commitment
	What is EoE and how is it treated?	Daily two-hour exercise restriction
	Have there been any deaths from POIT?	Personal reasons
Benefits and goals		
Eligibility		
Support		
Barriers		

Results

- We identified the following areas as the most important topics discussed: efficacy, practical information, safety, benefits and goals, eligibility criteria and support in making the right decision.
- For all families pursuing POIT for their child the initial goal was achieving protection from accidental exposures and cross-contamination. For approximately 25%, consumption of high peanut doses was the ultimate goal.

Conclusions

- Our study adds to the limited available data in this area and provides information that may be used as an initial platform for clinical consultations and shared decision-making in POIT.
- Obtaining a better understanding of patients' expectations and concerns will hopefully facilitate this process.

Poster Details

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Abstract Title: Identification of goals and barriers from families considering peanut oral immunotherapy

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