A note of caution: Pitfalls to OIT Success

(Overcoming "irrational enthusiasm")
("Be the perfect pilot")

JAMES W BAKER MD

My experience with oral desensitization therapy to foods

- Avoidance adrenaline strategy still the preferred approach for many patients
- Oral immunotherapy is the preferred strategy for a select group of patients
  - 80% proceed smoothly
  - 20% difficult
    - 10% difficult but achievable
    - 10% dropout in early stages
  - 30% drop out by age 25

Upfront contract
(how to talk to the patient and yourself at the same time)

- Introduction
- Their agenda
- Time allotted for both physician and patient
- My agenda
- Possible outcomes

Upfront contract

- Introduction
- Their agenda
  - Diagnosis stage
  - Treatment option stage
- Time allotted for both physician and patient
- My agenda
- Possible outcomes

Upfront contract

- Introduction
- Their agenda
- Time allotted for both physician and patient
- My agenda
  - “I do not know enough about you yet but my overall goal is to make a good decision about how to proceed”
- Possible outcomes

Upfront contract

- Introduction
- Their agenda
- Time allotted for both physician and patient
- My agenda
- Possible outcomes
  - 7 options

Matrix decision leading to options

- Continue avoidance/adrenalin strategy
- Slow 14 step challenge to find threshold followed by OIT
- 7 step challenge
- 4 step challenge
- Baked food challenge
- More testing, skin tests, sIgE, component
- Ok to consume
- Combined exercise and food challenge

Is the entire patient support circle on board? ("Sell the person who is not there")

- Spouse
- Grandparent
- Rest of family
- Referring physician
- Staff

PAP: DEAL WITH THESE PLAYERS

Choosing the patient appropriate for OIT

- Frequent severe episodes
- Significant change in lifestyle caused by food allergy
- Able to communicate
- 4-8 years old-best candidates
- Motivated
- PAP: PATIENT NEEDS ROOM FOR IMPROVEMENT

Choosing appropriate foods

- Food should be:
  - Not easily avoided
  - Easily administered
  - Easy to transfer and store
  - Measurable
  - PAP: USE COMMON SENSE

"What you do not know will hurt you" – develop PAPs and CAPs

- Vectors-who else might be source of food
- Food and confusion
- Home schedule
- Regular childcare
- Childcare while on vacation
- Summer camps
- Athletics
- Allergic rhinitis
- Asthma
- Other medical conditions
- Clear concise instructions regarding treatment for reactions

Choosing the parents

Two parents?

One domicile?

Both on same page?

Both motivated – which one is more motivated?

Family stress level?

Distance from medical care?

Language barriers?

Medical experience-not afraid to give adrenaline?

Never say "cure“
(some might be but we do not know who they are)

- Nonreactive state dependent on persistent exposure in the absence of significant risk factors
- Real life challenge
  - Triple maintenance dose
  - On a hot day
  - During the pollen season
  - After having a cold
  - Having asthma
  - Taking aspirin
  - Having recently finished playing soccer

Pitfall: Distance Traveled

- J.L., 5 y.o. from Calgary, Alberta, asthma, severe eczema, peanut allergy
- Upper respiratory infection
- Reacted to 1.0 grams of whole peanut
- Hives, wheezing and shortness of breath
- Responded to adrenalin
- Reached maintenance on next visit and has done well
- Remedial action plan: phone call day before long distance trip to make sure ready for appt.

Pitfall: Benign benevolent practice patterns

- 12 year old boy with peanut allergy, allergic rhinitis, hemolytic anemia,
- Up at 4 AM for fishing on Columbia Bar, home at 11 pm, mom a nurse gives dose, severe reaction occurs
- Dad is a friend and business partner
- Mom an ICU nurse, very headstrong
- Dad and mom disagree about doing OIT
- CAP: Avoid physician conversion, all the signs of trouble were there, disqualify yourself, never give doses after a hard day, be mindful of underlying conditions, avoid treating in face of parental disagreement

Pitfall: Poor communication with the office

- KD, 9 yo girl
- 2 peanut M&M's = 1.0 grams
- Generalized hives
- Treated with adrenalin in office
- 4 reactions at home requiring ER treatment and adrenalin
- Stopped because too frequent reactions
- Remedial action plan: all reactions need to be reported to our office

Pitfall: Family stress

- E. U. 9 year old boy
- Mom ICU nurse, Dad-brain cancer, Grandfather Doctor, Separation and divorce during process
- Frequent colds
- Dose cut back to 1 gram and slowly increasing
- At 2 grams, patient developed stomach pain, anxiety, difficulty swallowing, and hives
- Received adrenalin
- Difficult patient and family
- PAP: ask questions about the rest of the family – decide whether this is a good time

Pitfall: Childcare during family vacation

- CM 14 year old boy
- 400 mg solid peanut build-up dose tolerated
- 14 days later same dose given
- Vigorous basketball game within 1 hour of dosing
- Staying with uncle, adrenalin not available
- Transported to ER where adrenalin given
- Discontinued due to poor compliance
- Remedial action plan: ask how vacation childcare

Pitfall: Understanding late reactions can occur while outside observation window

- TS, 14 yo girl,
- 9:30AM received 8 grams,
- 10:30AM left office feeling OK
- 11:00AM stomach discomfort
- 2:00PM flushing
- 6:00PM vomiting
- 6:30PM red, flushing, feinted, given adrenalin, transported to ER, Now doing well since on 8 grams
- PAP: DISCUSS LATE REACTIONS

Pitfall: Late onset reaction in patient with poorly controlled asthma

- J.S.,14 yo boy, asthma on high dose combination inhaled medication
- Significant asthma attack and hives during a basketball game 6 hours after peanut dose
- ER visit, given adrenalin
- Normal pft and eNO on next visit
- We stopped for 3 months then restarted when asthma in good control
- Now tolerating maintenance dose
- CAP: DISCUSS ROLE OF EXERCISE AND LATE REACTIONS

Fall: Realizing that minor cold symptoms can cause late reactions

- HT, 12 yo girl,
- 4th day of a minor cold on maintenance of 8 peanut M&M's (4 grams)
- Sudden episode of hives and dyspnea during choir practice at school 6 hours after dosing.
- Required adrenalin
- Discontinued care
- CAP: CUT DOSE DURING AND AFTER COLDS

NSAID plus Peanuts

- 6 year old ballerina
- OK with Ibuprofin alone
- OK with peanut alone
- Reacted twice with the combination
- CAP: AVOID NSAID'S COMBINED WITH OIT DOSING

Vaccination Plus URI

- Patient seen for illness visit most likely a viral infection
- Given Hepatitis B vaccination
- 2 days later – spontaneous severe anaphylactic episode
- CAP: CUT OR SKIP DOSES NEAR VACCINATION DATES

Eosinophilic Esophagitis

- Theoretical risk
- Doubt whether IgE mechanisms are involved
- 3 kids scoped, none positive
- PAP: CHECK OUT PERSISTENT GI SX AND DO NOT DO OIT IN THIS GROUP

Total Allergic Load

- Greater incidence of reactions during heavy pollen seasons
- PAP: CUT DOSE DURING POLLEN SEASON, GIVE DOSES EARLY IN AM BEFORE EXPOSURE, SKIP DOSES IF SYMPTOMATIC

Hiding food

- Resulted in skipped doses
- Subsequent reaction
- CAP:Watch child swallow the dose

Hot tub/Hot shower/Electric Blanket

- Heat makes Mast Cells release histamine
- CAP: AVOID HOT EXPOSURES AFTER DOSING

Pitfalls to physicians making good decisions

- Friendship trap
- Travel drop
- Plane travel
- Late afternoon
- Traffic
- Cost
- Double coverage necessary
- Reluctance to give adrenaline for skin and GI symptoms
- Reluctance to cancel Appointments