



“Apples make me itchy!”

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Notes on Cheryl

Age: 35

Presentation: Over the past six months, Cheryl has noticed itchy mouth, lips and throat after eating apples, peaches, cherries, plums and pears.

- ✓ Symptoms are lessened, but are still present when she eats these same fruits with the skin peeled.
- ✓ Tolerates apple pie and canned peaches without difficulty.
- ✓ Eats oranges, bananas and mangos without difficulty.
- ✓ No previous food allergies.
- ✓ Five-year history of seasonal allergic rhinoconjunctivitis with symptoms worse in the spring.
- ✓ Symptoms are generally well-controlled with an antihistamine.
- ✓ Never had asthma or eczema, but there is family history of atopy.
- ✓ Past history is unremarkable.
- ✓ Only medication is birth control pill.
- ✓ Physical exam is unremarkable.

What do you suspect?

Answer:

Oral allergy syndrome with northern tree fruits

- ✓ Some individuals who are allergic to tree pollen experience oropharyngeal itching when they consume the fruits of the northern trees, including apples, peaches, plums and pears.
- ✓ The antigen to which they are sensitized is a glycoprotein present in both the fruit and pollen of the northern trees.

Northern tree fruit allergy is not usually dangerous; avoidance is all that is required.

- ✓ The glycoprotein is heat-labile and easily destroyed by processing or heating; this explains why these individuals can tolerate cooked apples or canned peaches.
- ✓ Northern tree fruit allergy is not usually dangerous, as it rarely leads to significant compromise of the upper airway or anaphylaxis.
- ✓ Avoidance is all that is required.

- ✓ Skin testing to the food allergens can be done, but is often unnecessary since a diagnosis can be made on the basis of history.
- ✓ Testing to commercially available extracts of fruits may not be helpful; having been processed, these antigens may be denatured and yield false-negative skin test results.
- ✓ If testing is deemed necessary or helpful in some way, it may have to be performed with extracts of fresh fruit. **Dx**

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