Food Protein-Induced Enterocolitis Syndrome (FPIES)

- Non-IgE-mediated immunologic disorder
- Usually occurs in young infants
- Manifests as chronic emesis, diarrhea, and failure to thrive.
- Upon re-exposure to the offending food after a period of elimination, a sub-acute syndrome can present with repetitive emesis and dehydration.
Food Protein-Induced Enterocolitis Syndrome (FPIES)

- Cow’s milk and soy protein are the most common causes
- Reactions can occur to other foods: rice, oat or other cereal grains.
- A similar condition occurs in adults, most often related to shellfish ingestion.
Three Months Old with Food Protein Induced Enterocolitis

- Skin testing to cow milk and soy is negative
- Serum IgE to cow milk and soy is absent
- During the episodes, a CBC with diff shows a high white count
- Removal of cow milk and soy from the diet
- Introduction of cereals in the allergist’s office
The Eosinophilic Gastrointestinal Diseases (EGID)

- Disorders that primarily affect the gastrointestinal tract with eosinophil-rich inflammation in the absence of known causes for eosinophilia
- Diagnosis is Based on a constellation of clinical symptoms and endoscopic gastroduodenoscopy (EGD) or colonoscopy with examination of biopsy specimens for eosinophilic inflammation of the mucosa
Seventeen Year Old with Eosinophilic Esophagitis

• Skin testing to a large panel of food allergens
• Skin testing to a limited number of food allergens
• Patch testing to a limited number of food allergens
• Disorder is chronic and recurrent
Oral Allergy Syndrome

- Pollen-associated food allergy syndrome
- Localized IgE-mediated allergy, usually to raw fruits or vegetables.
- Most commonly affects patients who are allergic to pollens.
- Common allergens are lipid transfer proteins (LTP)
- Symptoms include itching of the lips, tongue, roof of the mouth, and throat, with or without swelling.
Fifteen Year Old with Oral Allergy Syndrome

- Skin tests:
- To foods that cause reaction by history using commercial extracts
- To foods using fresh fruits and vegetables
- To cross reacting environmental allergens
Exercise Induced Anaphylaxis

Condition where:

- eating the food alone does not cause symptoms
- exercising alone does not cause symptoms
- Eating the food and exercising causes the symptoms
- Implicated foods have varied from celery to chicken to wheat
17 Year Old with Food-Exercise Anaphylaxis

• Skin testing with suspected foods
• Exercise test
• Food and exercise test
The Auriculotemporal Syndrome

• Frey syndrome, Baillarger’s syndrome, Dupuy’s syndrome, Auriculotemporal syndrome

• Tart foods cause gustatory flushing syndrome, an erythematous band on the skin of the cheek along the distribution of the auriculotemporal nerve branch of the Trigeminal nerve
  - carries sympathetic fibers to the sweat glands of the scalp and parasympathetic fibers to the parotid gland.
The Auriculotemporal Syndrome

- Parotid gland surgery
- Endoscopic thoracic sympathectomy
- Trauma to the auriculotemporal nerve
- Forceps-assisted delivery in childhood: unilateral involvement.
- Familial: bilateral Frey syndrome
Ten year Old with Auriculotemporal Syndrome

• No testing is necessary

• Allergist awareness of the various syndromes and a meticulous history

• A Challenge in the office to any food would elicit the symptoms and reassure the child and the family that the symptom will not progress beyond the red streak on the face
Heiner Syndrome

- Chronic or recurrent lower respiratory symptoms often associated with upper respiratory & GI symptoms and FTT and related to ingestion of cow milk.

Heiner Syndrome

- Chest CXR may show patchy infiltrates, localized atelectasis, consolidation, peribronchial infiltrate, hilar adenopathy, pleural thickening, or reticular density.
- May have eosinophilia &/or iron deficiency anemia.
- Serum precipitating antibodies to multiple cows’ milk protein fractions.
- Pulmonary hemosiderosis in some cases.
- Resolution on cow’s milk free diet.
Bilateral perihilar infiltrates & RML atelectasis while the child on milk-containing diet & symptomatic.

Cleared on milk elimination & remained so for 4 wk after reintroduction of milk & patient still asymptomatic.

Recurrence of bilateral infiltrate after 5 wk of reintroduction of cow’s milk & patient became symptomatic.
Three Months Old with Heiner Syndrome

• The use of an elimination diet in combination with a convincing history may be sufficient to diagnose Heiner syndrome
Case

- Betty Croker German Chocolate Cake has Hazelnuts
- Advised to avoid all nuts, peanuts and given epinephrine
- RAST are drawn