# Allergy tests



Raccoon Eyes



Fatigue



Depression



The Allergic Salute



**Trouble Concentrating** 



Chronic Congestion



Wheezing



Hives



Itchy Skin



Insomnia

### Common symptoms of allergy

- Nose: swelling of the nasal mucosa
- Sinuses: allergic sinusitis
- Eyes: redness and itching of the conjunctiva
- Airways: sneezing, coughing, Wheezing, asthma, laryngeal edema
- Ears: feeling of fullness
- Skin: rashes
- Gastrointestinal tract: abdominal pain, bloating, vomiting, diarrhea

#### cause

- Ingested allergens: Foods (peanut, milk, soy, wheat, chicken, egg, beef, seafood, chesses, vegetables, fruits, ...)
- Inhalant allergens: Pet danders, dust mites, mold spores, pollen, cockroaches
- Other allergens: latex, drugs, insect stings









Pollen

**Animal Dander** 

**Dust Mites** 









Molds

Cockroaches

Fragrance

Insect Stings





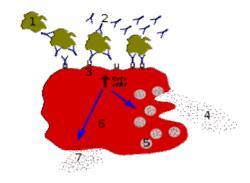


Foods

Medication

Latex

- Immediate hypersensitivities
- Antibody- mediated cytotoxicity
- Immune complex disorders
- Cell-Mediated hypersensitivities



#### **ALLERGY TEST**

- Skin test:
  - skin prick test.
  - Intradermal test.
  - Patch test
- Blood tests: RAST, specific IgE antibodies level, elisa...
- Other tests:
  - Elimination type tests
  - Unproven allergy tests:
  - Cytotoxic testing
  - Provocation- neutralization
  - Electrodermal diagnosis
  - Kinesiology
  - Reaginic pulse
  - Body chemical analysis
  - Measurement of IgG antibodies
  - Histamine release assays

#### Contraindications for skin test

- History of anaphylaxis
- High risk of anaphylactic reaction to testing( poor controlled asthma, reduced lung function, history of severe reaction to minute amounts of allergens)
- Rashes, acute skin injection
- Can not stop medication
- Cardiovascular disease( coronary artery, cardiac arrhythmias)

Skin prick or scratch test kit

### Skin prick tes



- The first choice
- Simple, quick, safe, sensitive, inexpensive

Indentify inhaled allergens, ingested allergens, determine whether a person may be allergic to a medicine or insect venom

- Place drops of the possible allergen on the skin
- Prick the skin under each drop with a needle
- Check the skin after 12 to 15 minutes for red, raised itchy areas called wheals
- The rate of systemic reactions to skin prick testing was 0,001%
- If skin prick test negative: choose intradermal test at a later visit



#### Intradermal test

- The intradermal test is sensitive more than the skin prick test
- A small amount of the allergen solutions is injected into the skin

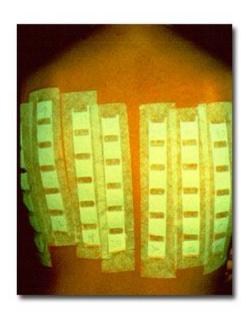
Intradermal allergy test reactions





#### Patch test

- Doses of the allergens are placed on the patches that look like adhesive bandages
- Wear the patches for 24 to 72 hours, no bath, no exercise
- Contact dermatitis



### Blood test(immunoassay)

- Measure the mount of specific IgE, RAST, elisa
- When?
  - -Rick of an anaphylaxis.
  - -Rash(hives, eczema).
  - -Can not stop taking a medicine (antihistamine, tricycle antidepressant, beta blocker, ACE inhibitor, immunomodulatory creams, topical steroids)
  - -unusual and rare allergens are suspected
- Less sensitive than skin test
- Cost more than skin test

#### IDENTIFY POSITIVE TEST

- Positive skin test: a wheal created by the allergen is at least 3mm larger than the reaction to the negative control
- Positive blood test: the levels of immunoglobulin IgE antibodies for a particular allergen or group of allergens are four times the normal level

## Thank you

