

Anaphylaxis Patho

Kelli Duriex MSN, RN
Module 3

Type I

0 Allergy

The deleterious effects of hypersensitivity to exogenous antigens

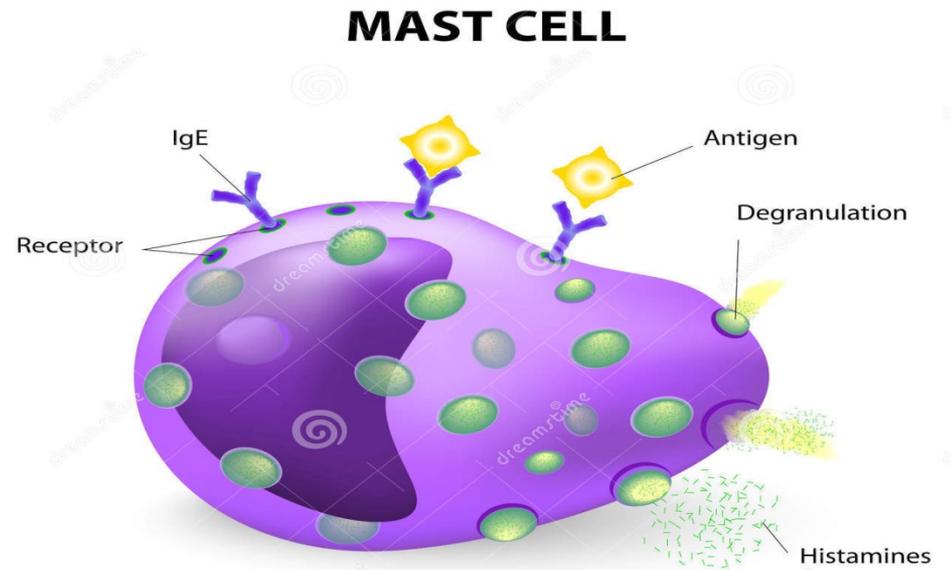
0 Most common allergies are Type I

0 Pollen, Mold, Fungi, Foods, Animals, Dust, and almost anything we encounter in our environment

0 Atopic-genetic predisposed

IgE

0 Reactions are mediated by antigen-specific IgE and the products of tissue mast cells



Anaphylaxis

- 0 Immediate Type I hypersensitivity
- 0 Rapid release of IgE-mediated chemicals
- 0 Induces severe, life-threatening allergic reaction
- 0 Food, Drug, and Insect bites

Allergy S/S

- 0 Allergy
 - 0 Watery, runny eyes
 - 0 Runny nose
 - 0 Sneezing
 - 0 Nasal congestion
 - 0 An itchy rash or hives

Anaphylaxis S/S

0 Lungs:

- 0 Trouble breathing or noisy breathing
- 0 Coughing, wheezing
- 0 Sneezing
- 0 Congestion
- 0 Tightness in the lungs
- 0 Hoarseness

0 Heart and Blood Vessels

- 0 Chest pain
- 0 Low blood pressure
- 0 Weak, rapid pulse
- 0 Dizziness, fainting

0 Skin

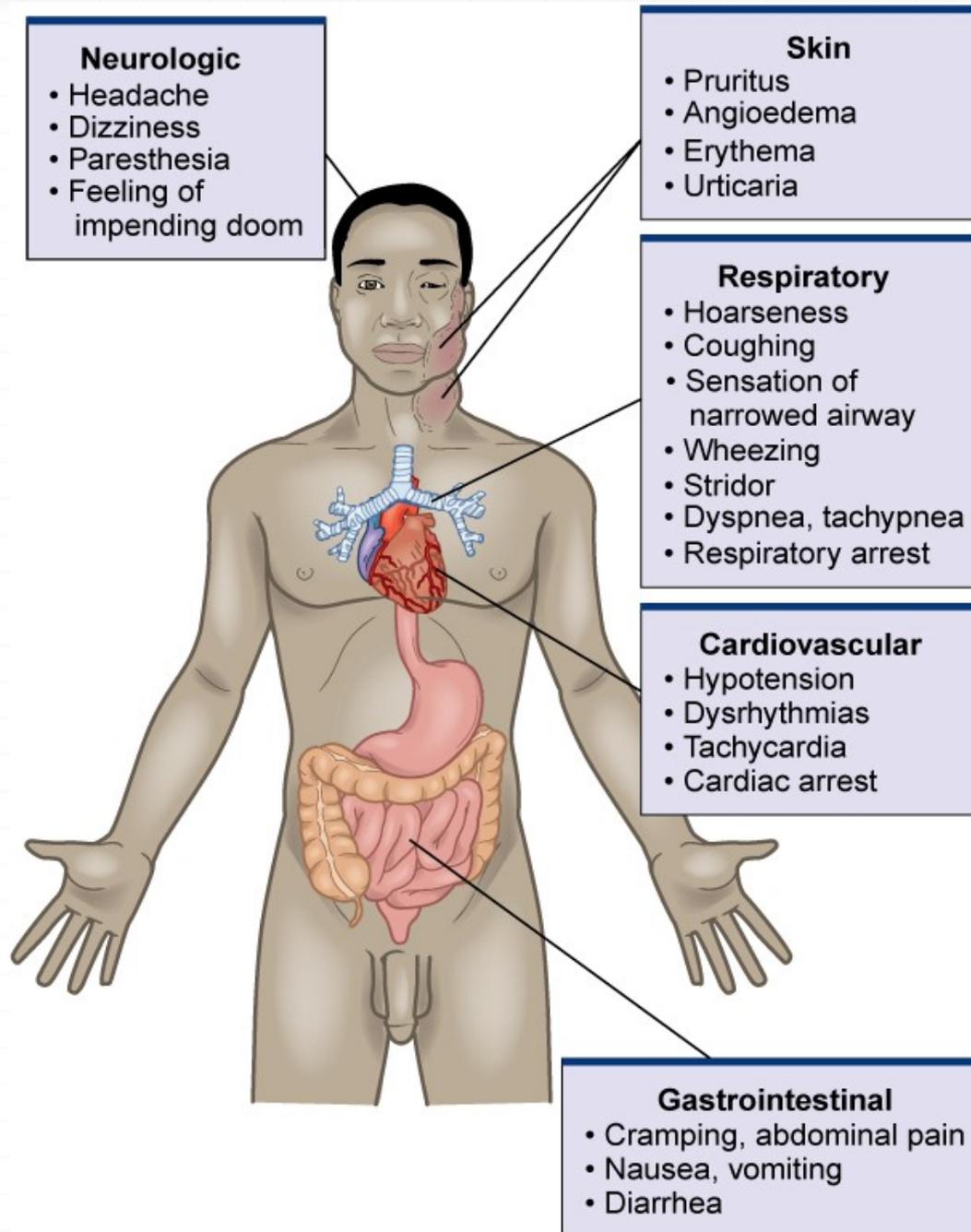
- 0 Pale or flushed skin
- 0 Hives or welts
- 0 Itchy skin
- 0 Sweating

0 Mouth

- 0 Swelling of the throat, face, lips, or tongue

0 Stomach and Digestion

- 0 Abdominal pain
- 0 Nausea, vomiting
- 0 Diarrhea



Treatment

- 0 First line – Epinephrine
- 0 Benadryl

Epinephrine

0 Action- Adrenergic response

0 Route SQ- Onset 5-10 min

Peak 20 min

Duration- 1-4hr

IM- Onset 6-12 min

Peak Unknown

Duration 1-4hr

IV- Onset rapid

Peak 20 min

Duration 20-30 min

EPI-Pen

- 0 Dosage- 0.3mg IM, one time dose
- 0 Light sensitive- keep in storage tube
- 0 Administer in the thigh

Anaphylactic Reactions

0 Dosage

- 0 **SQ, IM** - 0.1-0.5 mg (not to exceed 1mg); may repeat every 10-15min
- 0 **IV-** 0.1 – 0.25 mg every 5-15 min, may be followed by 1-4mcg continuous infusion

Benadryl

0 Action- Antagonizes the effects of histamine at the receptor site

0 Route - PO- Onset 15-60 min

Peak 2-4 hr

Duration 4-8hr

IM- Onset 20-30 min

Peak 2-4 hr

Duration 4-8 hr

IV- Onset Rapid

Peak Unknown

Duration 4-8 hr

Anaphylactic Reaction

- 0 PO- 25-50mg every 4-6 hrs, not to exceed 300mg/day
- 0 IM, IV- 25-50mg every 4hrs PRN, not to exceed 400mg/day

Questions???

0 You are responsible for this