Epinephrine for Anaphylaxis

MEDICATION

THE DRUG

Class: Sympathomimetic

Mechanism: alpha (vasoconstriction), beta 1 (increased heart rate and contractility), beta 2 (bronchodilation)

USE IT FOR

- Anaphylactic shock; bronchial asthma; exacerbation of COPD; cardiac arrest

DON'T GIVE / CAUTION

- Contraindicated (per page) in conscious patients with underlying cardiovascular disease, hypertension, pregnancy, or tachyarrhythmias
- Protect from light; deactivated by alkaline solutions
- Monitor blood pressure, pulse, and ECG constantly

DOSE

Adult: 0.3 mg IM / EpiPen

Peds: Refer to Handtevy for dosage

WATCH FOR

- CNS: anxiety, dizziness, nervousness, agitation, headache
- Cardiovascular: arrhythmias, chest pain, hypertension, palpitations, tachycardia
- GI: nausea, vomiting; endocrine: hyperglycemia, hypokalemia
- Neuromuscular: tremors, weakness; respiratory: dyspnea, pulmonary edema

PEARLS

- Do not delay administration of Epi in anaphylaxis
- Differential on the page: urticaria (rash only) vs anaphylaxis (systemic) vs angioedema vs asthma/COPD exacerbation
- Adjuncts listed on the page: diphenhydramine, albuterol, DuoNeb, Solu-Medrol, Decadron, magnesium sulfate

Take Home Message:

In anaphylaxis, epinephrine is the treatment and delay is the danger — 0.3 mg IM, and do not wait on the adjuncts.