

ACE INHIBITORS

PROTOTYPE DRUG lisinopril
(Prinivil, Zestril)

Drug of choice for HF

Reduce afterload

Increases cardiac output

Enhance excretion of sodium and water - Lowers peripheral resistance and reduces blood volume

PRIMARY USE: To decrease BP and reduce blood volume; dilate veins

ADVERSE EFFECTS:

- First-dose hypotension
- Cough
- Hyperkalemia
- Renal failure

ANGIOTENSIN II RECEPTOR BLOCKERS (ARBs)

END IN "-SARTAN"

PROTOTYPE DRUG: candesartan
(Atacand)

Actions very similar to ACE inhibitors

Usually used for pts who are unable to tolerate ACE inhibitors

PRIMARY USE: HTN and HF (for those who can't tolerate ACE inhibitors)

ADVERSE EFFECTS:

Hypotension
Hyperkalemia

PATIENT TEACHING: Sodium & potassium restrictions
Contraception

DIURETICS

PROTOTYPE DRUG furosemide
(Lasix)

Increase urine flow

Reduce - blood volume and cardiac workload
- Edema and pulmonary congestion

Prescribed in combination with other drugs

PRIMARY USE: Diuretic

ADVERSE EFFECTS:

- Electrolyte imbalances
- Hypovolemia
- Orthostatic hypotension

CARDIAC GLYCOSIDES

PROTOTYPE DRUG digoxin
(Lanoxin)

Increase force of heartbeat, slow heart rate

Improve cardiac output

Second-line treatment for HF

Narrow therapeutic range

PRIMARY USE: To increase contractility or strength of myocardial contraction

ADVERSE EFFECTS:

- Neutropenia
- Dysrhythmias
- Digital toxicity

Beta-Adrenergic Blockers "-olol" (Antagonists)

Beta-Adrenergic Blockers "-olol" (Antagonists) (cont)

ADVERSE EFFECTS:

- Fluid retention
- Worsening of HF
- Fatigue
- Hypotension
- Bradycardia
- Heart block

PHOSPHODIESTERASE INHIBITORS

PROTOTYPE DRUG milrinone
(Primacor)

Block enzyme phosphodiesterase

Increase calcium for myocardial contraction

Cause positive inotropic response and vasodilation

Increase contractility & decrease afterload

Short-term therapy only

PRIMARY USE: As a short term therapy for HF

ADVERSE EFFECTS:

- Hypokalemia
- Hypotension
- Ventricular dysrhythmias

DIRECT VASODILATORS

DIRECT VASODILATORS (cont)

- Stopping abruptly can cause rebound HTN
- Flushing
- Reflex tachycardia
- Palpitations
- Lupus-like reaction
- Hypotension

CONTRAINDICATED IN THOSE WITH:

- Tachycardia
- Angina
- Rheumatic heart disease

PROTOTYPE DRUG metoprolol
(Lopressor, Troprol XL)

Slow HR and reduce BP
(Negative) inotropic effect
Reduce workload of heart

PRIMARY USE:
- Reduce symptoms of HF
- Slow progression of disease

PROTOTYPE DRUG: hydralazine
(Apresoline)
Sometimes used in combination with isosorbide dinitrate (Isordil)

PRIMARY USE:
- Antihypertensive
- Treatment of hypertensive crisis

ADVERSE EFFECTS:

