

Heart Failure: Therapist's Guide to Commonly Used Medications

Medication	Commonly Prescribed	Therapeutic Effect	Mechanism of Action	Side Effects/Rehab Implications
Angiotensin Converting Enzyme (ACE) Inhibitors	Vasotec Capoten Quinapril Lisinopril	Vasodilation - Improves ease of blood flow and decreases workload on heart	Inhibits conversion of angiotensin I to angiotensin II (which is a vasoconstrictor)	Hypotension, electrolyte imbalances (hyperkalemia often seen), Dizziness and headache, drowsiness
Angiotensin II Receptor Blockers (ARBs)	Candesartan Losartan Valsartan	Vasodilation - Improves ease of blood flow and decreases workload on heart	Prevents angiotensin II from binding to its receptor (and therefore prevents vasoconstriction)	Peripheral edema, fatigue, back pain, abdominal pain, nausea, tachycardia, palpitations
Angiotensin-Receptor Neprilysin Inhibitors (ARNIs) [combo]	Sacubitril/ Valsartan Enestro	Vasodilation Lowers BP	Same as above and... Increases natriuresis (lowers the concentration of Na in the blood and lowers blood volume)	Hypotension, hyperkalemia, cough, dizziness, orthostasis
I(f) Channel Blocker	Ivabradine	Lowers HR	Blocks the channel responsible for the cardiac pacemaker I(f) current, which regulates heart rate	Bradycardia, hypertension, a-fib, light sensitivity
Antidysrhythmics	Digoxin	Controls HR	Inhibits binding of ATPase enzyme, increasing calcium uptake which increases force of contraction	Dizziness, mental disturbances, nausea, diarrhea, headache, vision changes, fatigue (could be due to digoxin toxicity)
Beta Blockers	Bisoprolol Metoprolol Succinate Carvedilol	Controls HR Lowers BP Decreased O2 demand Increased exercise tolerance	Binds to beta-adrenoreceptors and prevents binding of norepinephrine and epinephrine at these receptors – preventing sympathetic stimulation of heart	Respiratory issues, can be problematic if pt has asthma/COPD (beta agonists) syncope, BP fluctuations, depression, dizziness, Headache, fatigue
Vasodilators & Nitrates	Isosorbide dinitrate; Hyralazine	Lowers BP Decreased O2 demand	Relaxes smooth muscle causing vasodilation	Hypotension, tachycardia, palpitations, dizziness and Headache, Nausea and vomiting
Aldosterone Antagonists	Spirolactone Eplerenone	Lowers BP, Decreases bodily fluids	Blocks the effects of aldosterone (Blocks reabsorption of sodium, encouraging water loss)	Hyperkalemia, muscle weakness, dizziness, fatigue
Diuretics	Furosemide Bumetanide Torsemide Chlorothiazide	Lowers BP through passing excess fluid Decreases buildup of fluid in lungs and extremities	Blocks absorption of sodium, chloride, and water from the fluid in the kidney tubules – causing an increase in the output of urine	hypotension, dehydrated, frequent falls (from increased urination), electrolyte imbalance- muscle spasms,
Anticoagulants	Warfarin Heparin	(used when A-fib is present) Aids in prevention of DVT, PE, CVA	Interferes with clotting factors in order to “thin the blood”	Dizziness, lethargy, taste disturbance, headache, abdominal pain, easily bruised, abnormal INR