

SUGAR LAND HEART CENTER

ACLS Drugs and Treatment Page-1

Name	Indications Features	Start	Frequency	Precautions
Adenosine	PVST. 6 mg premixed vial	6 mg IV bolus in 1-3 sec. Flush with 20 ml NS	12 mg second and doses in 1-2 min intervals	Flushing, CP, drop in BP, bradycardia. Doesn't convert AF, A. Flutter, or VT
Amiodarone	Cardiac arrest, VT, VF, AF, SVT, and PSVT.	Arrest: 300 mg IV 150 mg in 3-5 min Wide QRS tachycardia 150 mg IV in 10 min	Repeat 150 mg IV. Slow: 360 mg IV /6h. Maintenance: 540 mg IV/18 h.	Hypotension, prolonged QT interval, Use caution in renal failure. Negative inotropic effect
Amrinone	CHF, low CO Use NS not D5W	Loading: 0.75 mg/kg over 1-15 min	Infusion: 5-15 mcg/kg/min	Tachycardia, hypotension, thrombocytopenia
Aspirin	Antiplatelet agent 80-325 mg	One tab daily regular for acute case	Enteric coated for chronic use	Bleeding, gastric ulcers,
Atropine sulfate	Bradycardia Asystole	Asystole: 1 mg IV push Repeat every 3-5 min Max: 0.03-0.04 mg/kg	Bradycardia: 0.5 to 1 mg IV every 3-5 min. Max: 0.04 mg/kg	Increases myocardial demand, causes hypoxia. Not useful in infra-nodal AV block or CHB with wide QRS
Beta Blockers Metoprolol	PSVT, SVT, MI, BP	5 mg IV at 5 min intervals X 3	50 mg bid or 100 mg bid PO	Bradycardia, hypotension, bronchospasm, worsens CHF
Atenolol	PSVT, SVT, MI, BP	5 mg IV over 5 min Repeat 5 mg in 10 min	50 mg qd, 50 mg bid Max: 100 mg bid	Bradycardia, hypotension, bronchospasm, worsens CHF
Propranolol	PSVT, SVT, MI, BP	0.1 mg/kg IV push X 3 doses at 2-3 min interval		Bradycardia, hypotension, bronchospasm, worsens CHF
Esmolol	PSVT, SVT, MI, BP	0.5 mg/kg/ over 1 min	Infusion: 0.05 mg/kg/min max: 0.3 mg/kg/min	Bradycardia, hypotension, bronchospasm, worsens CHF
Lobetalol	Hypertension	10 mg IV over 1-2 min	Repeat same or double dose in 10 min. Max: 150 mg	Bradycardia, hypotension, bronchospasm, worsens CHF
Calcium Chloride	Hyperkalemia Hypocalcemia Routinely not used	8-16 mg/kg (5-10 ml) IV	May repeat as necessary	Do not use routinely. Do not mix with sodium bicarbonate
Cardioversion	PSVT, At. Flutter Symptomatic PSVT, atrial flutter, VF, VT	50, 100, 200, J 50, 100, 200, 300 100, 200, 300, 360 100, 200, 300,360 J	Biphasic: SVT: 30, 50, 100 VT: 150	Make sure the R waves are synchronized. Clear the patient
Defibrillation	Pulse less VT or VF	200, 300, 360 J	Biphasic: Use less energy-150 J	Clear the patient.
Digibind	Digitalis toxicity	3 to 5 vials IV		Serum digoxin level rises after digibind and is not reliable.
Digoxin	AF, A. Flutter PSVT	Loading dose: 10-15 mcg/kg lean mass (0.75 to 1 mg)	Maintenance: depends on body size & renal function	PVCs, arrhythmias.

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Diltiazem	Rate control in AF or A. Flutter	15-20 mg IV over 2 min repeat in 15 min	Infusion: 5-15 mg/hr	Hypotension. Avoid in WPW, wide QRS tachycardia
Disopyramide	Wide QRS tachycardia	2 mg/kg over 10 min	Infusion: 0.4 mg/kg/h	Arrhythmogenic, negative inotropic effect.
Dobutamine	CHF, Low CO		2-20 mcg/kg/min	Tachycardia, headache
Dofetilide	At. Fib	8 mcg/kg over 30 min		QT prolongation Torsades-de-pointes
Dopamine	Bradycardia, Hypotension	1-5 mcg/kg/min-L 5-10mcg/kg/min-M 10-20mcg/kg/min-H		Tachycardia, increases myocardial oxygen demand
Epinephrine	Cardiac arrest, Bradycardia, Hypotension, anaphylaxis	1:1000 dilution 1:10,000 dilution 1 mg IV every 3-5 min Higher dose: 0.2 mg/kg	Infusion: 30 ml (30 mg) in 250 ml NS at 100 ml/h	Increases heart rate High doses don't improve survival or neurological outcome
Fibrinolytics Activase	Acute Q wave MI	15 mg bolus IV .75 mg/kg in 30 min .5 mg/kg in 60 min		Internal bleeding, CNS bleeding
Fibrinolytics Retavase	Acute Q wave MI	10 U IV bolus-2min	10 U IV bolus after 30 min	Internal bleeding, CNS bleeding
Fibrinolytics Streptokinase	Acute Q wave MI	1.5 million U in 1 h		Allergic reaction, bleeding
Fibrinolytics TNKase	Acute Q wave MI	30-50 mg based on weight		Internal bleeding, CNS bleeding
Flecainide	AF, A. Flutter, PSVT, VT, PVCs	2 mg/kg IV	Infusion: 10 mg/min	bradycardia, hypotension, and paresthesia. Avoid in pts with LV dysfunction
Flumazenil Respiratory depression		0.2 mg IV in 15 sec	0.3 mg IV in 30 sec 0.5 mg IV in 30 sec	Short acting
Furosemide	Pulmonary edema	0.5-1 mg/kg over 1-2 min. Double the dose if no response	Repeat every 4-6 hours	Monitor potassium, magnesium. Hypotension
Glucagan	CCB or Beta blocker toxicity	1-5 mg over 2-5 min		Vomiting, hyperglycemia
Glycoprotiens IIb IIIa Inhibitors Integrelin	Acute coronary syndrome	ACS: 180 mcg/kg/ IV bolus PCI: 135 mcg/kg IV bolus. Second bolus in 15 min	ACS: 2 mcg/kg/min PCI: 0.5mcg/kg/min	CNS bleeding, hematoma low platelet count

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Glycoproteins IIb IIIa Inhibitors Aggrastat	Acute coronary syndrome	ASC or PCI: 0.4 mcg/kg/min IV over 30 min	Infusion: 0.1 mcg/kg/min	CNS bleeding, hematoma, low platelet count
Glycoproteins IIb IIIa Inhibitors Reo-pro	Acute coronary syndrome	ASC: 0.25 mg/kg IV bolus PCI: 0.25 mg/kg/ IV	Infusion: 0.125 mcg/kg/min PCI: 10 mcg/min	CNS bleeding, hematoma, low platelet count
Heparin	MI, USA, ACS, DVT	MI: 60 IU/kg Bolus	Drip: 12 IU/kg/h PTT Q4-6 h	Bleeding, thrombocytopenia
LMWH: Fragmin	USA, DVT	1 mg/kg bid SC		Bleeding, thrombocytopenia
LMWH: Lovenox	ACS, DVT, USA	1 mg/kg bid SC		Bleeding, thrombocytopenia
Ibutilide	SVT, AF, A. Flutter	1 mg (10mL) IV over 10 min	Same second dose after 10 min	Ventricular arrhythmias
Isoproterenol	Symptomatic bradycardia	Infusion: 2-10 mcg/min		Increase myocardial work and ischemia
Lidocaine	PVCs, VT, VF	Cardiac arrest, VT: 1.0 to 1.5 mg/kg IV 0.5 to 0.75 mg/kg in 5-10 min	Infusion: 1-4 mg/min	Prophylactic use in MI is not recommended. Reduce dose in CHF or liver failure patients
Magnesium Sulfate	Refractory VF, Torsedes-de-pointes, Low magnesium	1-2 g in 10 ml D5W push. 1-2 g in 50 mL D5W over 5-60 min		Hypotension with rapid administration Use caution in renal failure patients
Mannitol	Reduce intracranial pressure	0.5 to 1 g/kg over 5-10 min	0.25 to 2 g/kg every 4-6 h IV	Watch fluid balance and osmolality. Use with caution in renal failure
Morphine sulfate	Chest pain, pulmonary edema	2-5 mg IV every 5-30 min		Hypotension, respiratory depression
Naloxone	Respiratory depression	0.4 to 2 mg every 2 min. Max: 10 mg		Short acting, allergic reaction
Nitroglycerine	Angina, hypertension	10-20 mcg/min	0.4 mg SL q5 min X 3	Hypotension, headache
Nitroprusside	Hypertension Onset: 30 seconds Peak: 1-2 min Duration: 3-5 min	50 mg/250 ml D5W 0.25 to 8.0 mcg/kg/min	Titrate every 5 min up to 5 mcg/kg/min	Wrap in foil. Thiocyanate toxicity, intrapulmonary shunting, hypoxia
Norepinephrine	Hypotension Onset: Immediate Peak: 1-2 min Duration: 2-5min	50 mg/250 ml D5W Infusion: 0.5 to 1 mcg/min	Titrate every 5 min up to 30 mcg/min	Increased myocardial oxygen demand, arrhythmias, tissue necrosis.

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Name	Indications Features	Start	Frequency	Precautions
Oxygen	Hypoxia	NC1-6L/min 24-44% VM 4-8L/min 24-40%	PR: 6-10L/min 35-60% BM: 15L/min 100%	Oxygen toxicity Reduce dose in COPD
Procainamide	PSVT, VT, AF	20 mg/min IV infusion	Infusion at 1-4 mg/min	Hypotension, wide QRS, reduced dose in CHF or CRF
Propaferone	SVT, VT	1-2 mg/kg infusion at 10 mg/min		Negative inotropic effects, bradycardia, hypotension
Sodium Bicarbonate	Hyperkalemia acidosis prolonged CPR	1 mg/kg IV bolus	Repeat 0.5 mg/kg every 10 min	Good CPR is a better buffer agent. Not recommended for routine use in cardiac arrest
Sotalol	AF, A. Flutter	1-1.5 mg/kg IV	10 mg/min	Hypotension, negative inotropic effect, bradycardia, arrhythmias
Trancutaneous Pacing	Symptomatic bradycardia, arrest, or heart block	Pace at 80 beats/min Gradually increase mA from 20 to 80	Asystole: use maximum mA.	Contraindicated in severe hypothermia. Conscious patient may need sedation
Vasopressin	VF, shock	40 U IV push		Increase myocardial ischemia and angina
Verapamil	PSVT, AF, A. Flutter	2.5-5.0 mg/ IV over 2 min	Second dose: 5-10 mg IV in 15-30 min Max: 20 mg	Avoid wide QRS tachycardia. hypotension, worsen CHF and LV dysfunction

End