ACLS Rhythm Recognition & Management — Supraventricular

Sinus & atrial rhythms · recognize, then treat

Renal Care Unit · clinician reference

SINUS & ATRIAL

RHYTHM & RECOGNITION	ECG STRIP		MANAGEMENT
Normal Sinus Rhythm P before every QRS; regular; 60–100			No treatment — baseline rhythm.
Sinus Bradycardia Regular, rate < 60			If symptomatic: **atropine 1 mg** (max 3 mg); pacing, dopamine or epinephrine. Treat cause.
Sinus Tachycardia Regular, rate > 100			Treat the **underlying cause** (pain, fever, hypovolemia, hypoxia, anxiety).
Sinus Arrhythmia Rate varies with respiration			Benign — no treatment.
Premature Atrial Complex Early P, abnormal morphology			Usually benign; cut stimulants/caffeine; treat cause.
Atrial Tachycardia Fast, abnormal P-wave axis			Vagal/adenosine; rate control (β-blocker or CCB); treat cause.
Multifocal Atrial Tachy ≥3 P morphologies; irregular			Correct **K^+/Mg^{2+}**; treat lung disease; CCB if needed (avoid β-blocker in COPD).
SVT (AVNRT) Narrow, regular, ~150–250; no P		PERI-ARREST	**Vagal → adenosine 6 → 12 mg**; β-blocker/CCB; cardiovert if unstable.
Atrial Flutter Saw-tooth flutter waves			Rate control (β-blocker/CCB) + anticoagulation; cardiovert if unstable; ablation.
Atrial Fibrillation Irregularly irregular; no P			Rate control + **anticoagulation** (weigh bleeding in HD); cardiovert if unstable.

SHOCKABLE VF · pulseless VT NON-SHOCK asystole · PEA PERI-ARREST unstable — treat per algorithm. Strips are schematic single-lead illustrations for pattern recognition; doses are usual adult values — verify locally.

ACLS Rhythm Recognition & Management — Junctional, Blocks & Special

AV conduction · paced, pre-excitation & the dialysis hyperkalemia ECG

Renal Care Unit · clinician reference

JUNCTIONAL & AV BLOCKS

RHYTHM & RECOGNITION	ECG STRIP		MANAGEMENT
Junctional Escape No/inverted P; 40–60			Treat cause; atropine if symptomatic; do **not** suppress the escape rhythm.
1st-degree AV Block Constant long PR (>0.20 s)			Usually none; review AV-nodal blocking drugs.
2nd-deg Mobitz I (Wenckebach) PR lengthens, then dropped beat			Observe; atropine if symptomatic; stop offending drugs.
2nd-deg Mobitz II Constant PR; sudden dropped QRS		PERI-ARREST	**Pacing** (usually permanent); atropine often ineffective; avoid AV-nodal blockers.
3rd-degree (Complete) P and QRS independent		PERI-ARREST	**Transcutaneous** → **transvenous pacing** → permanent pacemaker; atropine usually ineffective.

PACED & SPECIAL

RHYTHM & RECOGNITION	ECG STRIP		MANAGEMENT
Paced Rhythm Pacer spike before each complex			Verify capture/sensing; magnet if malfunction; treat the underlying rhythm.
WPW / Pre-excitation Short PR; delta wave			**Avoid AV-nodal blockers** in pre-excited AF; procainamide; cardiovert if unstable; ablation.
Hyperkalemia (dialysis) Peaked T → wide QRS → sine wave		PERI-ARREST	**Calcium gluconate 1–2 g** → insulin+D50, salbutamol, ±bicarb → **EMERGENCY DIALYSIS** (low-K bath).

SHOCKABLE VF · pulseless VT NON-SHOCK asystole · PEA PERI-ARREST unstable — treat per algorithm. Strips are schematic single-lead illustrations for pattern recognition; doses are usual adult values — verify locally.

Schematic ECG reference for trained personnel — for pattern recognition, not diagnosis. Correlate with the patient, a 12-lead ECG, and the responding physician's judgment. Verify all doses against your local protocols; in dialysis, suspect hyperkalemia early.

VENTRICULAR & ARREST

RHYTHM & RECOGNITION	ECG STRIP		MANAGEMENT
Premature Ventricular Complex Early, wide, bizarre QRS			Usually none; correct **K^+/Mg^{2+}** & ischemia; treat if frequent/symptomatic.
Accel. Idioventricular (AIVR) Wide, regular, 40–120; no P			Often benign (reperfusion) — observe; treat only if poorly tolerated.
Idioventricular / Agonal Slow, wide, dying rhythm			**CPR + ACLS**; treat reversible causes — usually a peri-arrest/agonal rhythm.
Monomorphic VT Wide, regular, fast		SHOCKABLE	With pulse — stable: **amiodarone**/procainamide; unstable: **synchronized cardioversion**.
Torsades de Pointes Polymorphic; twists around baseline		SHOCKABLE	**Magnesium 1–2 g IV**; stop QT drugs; correct K^+/Mg^{2+}; pacing; defibrillate if pulseless.
Ventricular Fibrillation Chaotic; no organized complexes		SHOCKABLE	**DEFIBRILLATE + CPR**; epinephrine 1 mg q3–5 min; amiodarone 300→150 mg.
Pulseless VT Wide regular VT, NO pulse		SHOCKABLE	Treat as VF — **DEFIBRILLATE + CPR**; epinephrine; amiodarone.
Asystole Flat line; confirm in 2 leads		NON-SHOCK	**CPR + epinephrine** 1 mg q3–5 min; NOT shockable; treat H's & T's (esp. K^+).
PEA Organized rhythm, NO pulse		NON-SHOCK	**CPR + epinephrine**; NOT shockable; find & treat the cause (H's & T's).

SHOCKABLE VF · pulseless VT NON-SHOCK asystole · PEA PERI-ARREST unstable — treat per algorithm. Strips are schematic single-lead illustrations for pattern recognition; doses are usual adult values — verify locally.

Schematic ECG reference for trained personnel — for pattern recognition, not diagnosis. Correlate with the patient, a 12-lead ECG, and the responding physician's judgment. Verify all doses against your local protocols; in dialysis, suspect hyperkalemia early.