Regular Really Wide Complex Tachycardia

REFRESHER

RECOGNIZE IT

- Wide QRS complexes with consistent timing, at a slower rate than typical tachycardia
- Clues on the page: QRS complex more than 200 ms; heart rate less than 120
- First think: toxicity (sodium channel blockade) or metabolic (hyperkalemia) — consider a metabolic or toxicity diagnosis

ASSESS

- Sodium channel blockers: tricyclic antidepressants (most common), type Ia and Ic antiarrhythmics, local anesthetics, propranolol, carbamazepine, quinine
- Toxicity signs: sedation/coma, seizures, hypotension, wide complex tachycardia, anticholinergic syndrome
- Hyperkalemia signs: weakness, fatigue, nausea/vomiting, palpitations, syncope, shortness of breath, chest pain
- Hyperkalemia ECG ladder: K 5.5–6.5 peaked T waves; 6.5–7.5 loss of P waves; 7–8 widening QRS; 8–10 arrhythmias, sine wave, asystole

ACT — FIRST MOVES

1. First-line treatment on the page: sodium bicarbonate — 2 amps
2. Flush between administrations
3. Calcium chloride — 1 amp

PEARLS

- Medication is first-line treatment for this rhythm, per the page — diagnose the cause, don't just chase the rate
- Hyperkalemia ECG also shows P wave widening/flattening and PR prolongation before the QRS goes bizarre

Take Home Message:

A really wide, slower tachycardia is a poisoning or a potassium until proven otherwise — bicarb and calcium are the page's first line.