Wolff-Parkinson-White

REFRESHER

RECOGNIZE IT

- A congenital accessory pathway (AP) with episodes of tachyarrhythmias — a pre-excitation syndrome
- Two tachyarrhythmia forms: AVRT, and atrial fibrillation or flutter conducted via the pathway

ASSESS

- ECG: PR interval <120 ms
- Delta wave: slurred, slow rise of the initial portion of the QRS
- QRS prolongation >110 ms; discordant ST-segment and T-wave changes
- Pseudo-infarction pattern in up to 70% of patients — negative delta waves as pseudo-Q waves, or prominent R waves in V1–V3 mimicking posterior infarction
- Afib with WPW: rate >200 bpm, irregular rhythm, wide and irregular QRS, stable axis

ACT — FIRST MOVES

1. Sort the rhythm into one of the page's two forms: AVRT (a re-entry circuit involving the accessory pathway)
2. Or atrial fibrillation/flutter conducting directly from atria to ventricles via the pathway, bypassing the AV node

PEARLS

- A WPW ECG can fake an infarct — check for the short PR and delta wave before calling the pattern ischemic

Take Home Message:

Short PR, delta wave, wide QRS: that's pre-excitation — and its dangerous form is afib conducting down the pathway at rates over 200.