Wellens Syndrome

REFRESHER

RECOGNIZE IT

- Biphasic or deeply inverted T waves in V2–V3, plus a history of recent chest pain that is now resolved
- Highly specific for critical stenosis of the left anterior descending artery (LAD)
- Patients are at extremely high risk for extensive anterior wall MI within days to weeks of the ECG finding
- The patient may have no pain at the time of the ECG, but will have had episodes of pain

ASSESS

- Type 1 (25% of cases): biphasic T waves in V2–V3 — initial positive, terminal negative
- Type 2 (75% of cases): deeply and symmetrically inverted T waves in V2–V3
- Pattern may extend to V1–V6; ECG pattern present in the pain-free state
- Isoelectric or minimally elevated ST segment (<1 mm); no precordial Q waves; preserved precordial R wave progression
- Recent history of angina; normal or slightly elevated serum cardiac markers

ACT — FIRST MOVES

1. Read the pattern as diagnostic of critical LAD stenosis — the page's diagnostic criteria are the recognition, history, and ECG findings above
2. Treat the pain-free patient as high risk: the danger window is days to weeks, not someday

PEARLS

- The pain being gone is part of the syndrome, not reassurance — ask about recent chest pain on every V2–V3 T-wave abnormality

Take Home Message:

Pain gone, T waves in V2–V3 biphasic or deeply inverted: that is a critical LAD lesion with an anterior MI days to weeks away.