Sgarbossa

REFRESHER

RECOGNIZE IT

- In LBBB or a paced rhythm, diagnosing an infarct from the ECG is difficult
- Sgarbossa identified 3 criteria, each with a score for STEMI

ASSESS

- Concordant ST elevation >1 mm in leads with a positive QRS complex — score 5
- Concordant ST depression >1 mm in V1–V3 — score 3
- Excessively discordant ST elevation >5 mm in leads with a negative QRS complex — score 2
- Smith modification: ST elevation is excessively discordant when, at the J-point, it is >25% of the depth of the S wave
- Smith modification: ST depression is excessively discordant when, at the J-point, it is >30% of the height of the R wave

ACT — FIRST MOVES

1. Apply the criteria to any suspected AMI with LBBB (the page's flowchart population)
2. Watch for the flowchart's escalators: hemodynamic instability or acute heart failure
3. Use serial ECGs and monitoring, per the page's flowchart
4. Positive pathway ends in STEMI notification

PEARLS

- Concordance is the heavy scorer: concordant elevation is worth 5, concordant depression in V1–V3 is worth 3
- Smith replaces the flat 5 mm discordance rule with a proportion — a quarter of the S wave

Take Home Message:

In LBBB, don't eyeball it — score it: concordant changes score highest, and Smith's ratio catches the discordant ones.