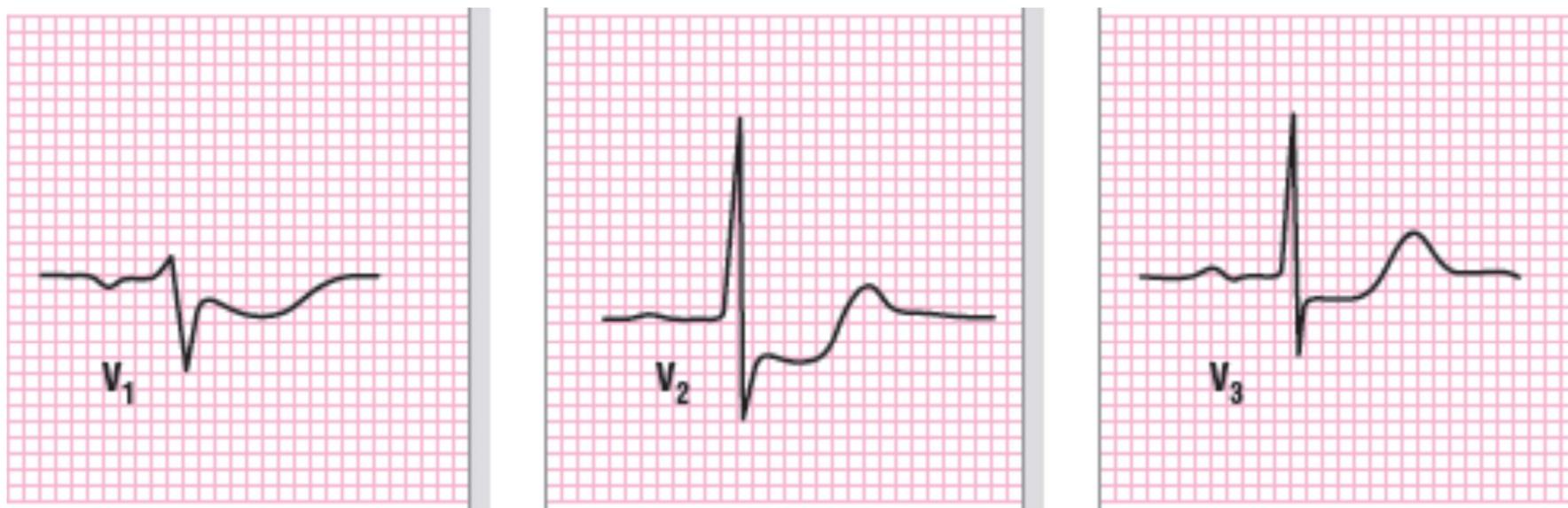
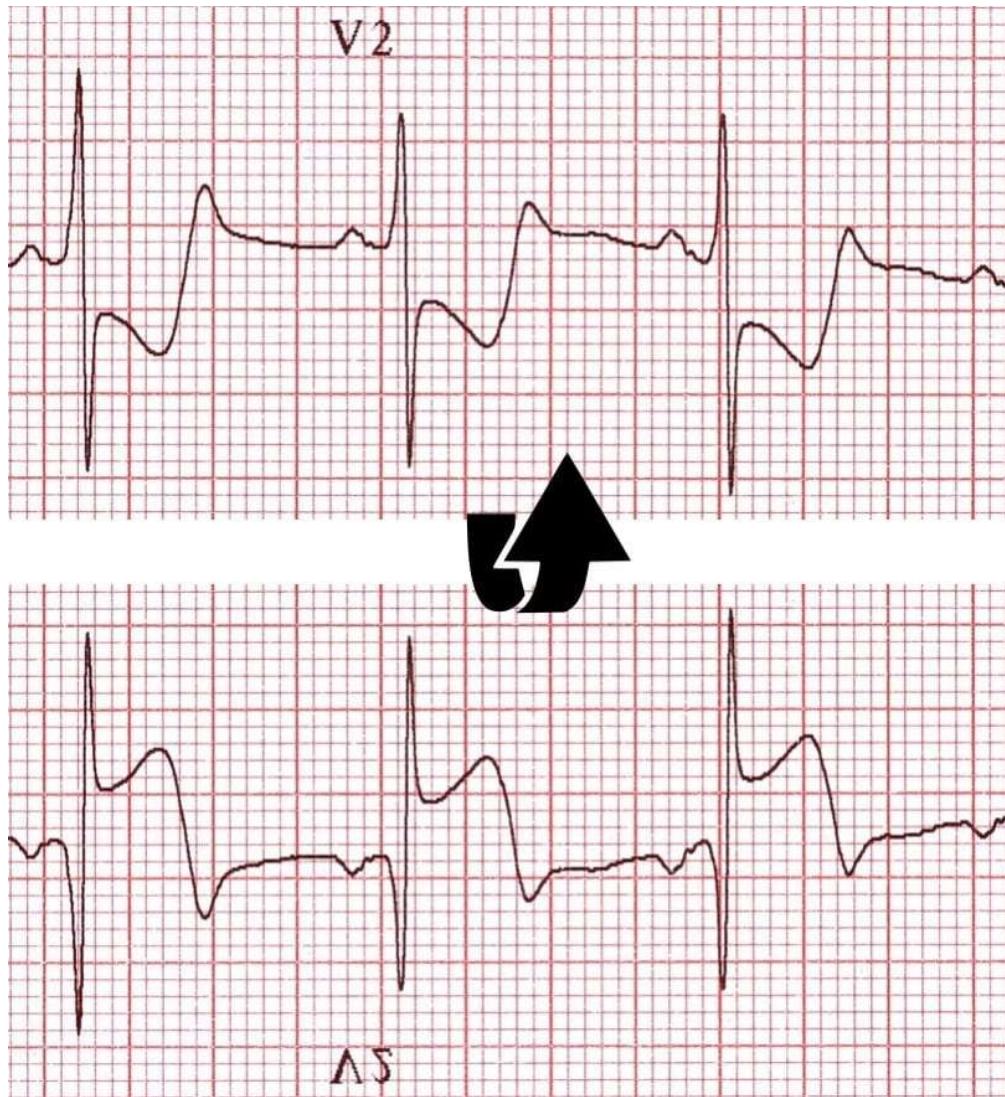


- Posterior MI (age recent or acute)



- Significant (usually  $> 2$  mm) ST segment depression in at least 2 consecutive leads from V1–V3 in the absence of conduction defect or RVH. If the posterior MI is not aborted with acute PCI to open the occluded left circumflex or right coronary artery, often a dominant R wave (R/S amplitude  $> 1$ ; initial R wave  $\geq 40$  msec) develops in leads V1-V3. However, as with the Q wave in acute MIs in other locations, you do not need to wait for the R wave to appear to call an acute posterior MI; the key is the ST depression in leads V1-V3
- Upright T waves are usually evident in V1-V3. The posterior wall of the left ventricle differs from the anterior, inferior, and lateral walls by not having ECG leads directly overlying it. Instead of Q waves and ST elevation, acute posterior MI presents with upside-down, mirror-image changes in the anterior precordial leads (V1–V3), including dominant R waves (posterior MI equivalent of abnormal Q waves) and horizontal ST segment depression (the upside-down, mirror-image of ST segment elevation).

The posterior wall of the left ventricle differs from the anterior, inferior, and lateral walls by not having ECG leads directly overlying it. Instead of Q waves and ST elevation, acute posterior MI presents with mirror-image changes in the anterior precordial leads (V1–V3), including dominant R waves (the upside-down, mirror-image of abnormal Q waves) and horizontal ST segment depression (the upside-down, mirror-image of ST segment elevation).



If you flip the paper copy of the ECG over and hold it up to a light so you can see the tracing through the paper, a posterior MI will reveal its true STEMl nature.

Acute posterior infarction is often associated with ECG changes of acute inferior or inferolateral MI, but may occur in isolation.

Posterior chest leads V7–V9 (electrodes placed in the 5th intercostal space at the posterior axillary line, mid-scapular line, and just left of the spine, respectively) demonstrating significant ST segment elevation confirm the presence of acute posterior MI.

RVH, WPW, and RBBB may interfere with the ECG diagnosis of posterior MI since these diagnoses may alter normal QRS activation in leads V1–V3.