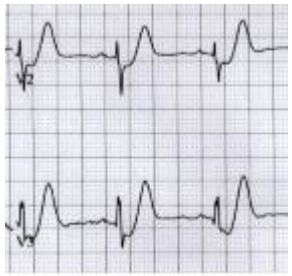
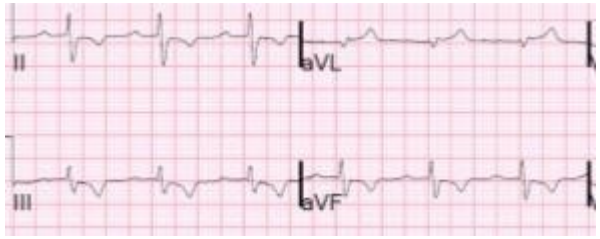
Foundations EKG II

Unit 8 Summary—Approach to Ischemia: NSTEMIs

One of the primary reasons an ED physician orders an EKG is to evaluate for ischemia. STEMI is defined by the American College of Cardiology as ST elevation > 0.1 mV in 2 or more contiguous leads. Ischemia can present as an ST elevation MI, but can also present with more subtle signs of ischemia which require careful consideration.



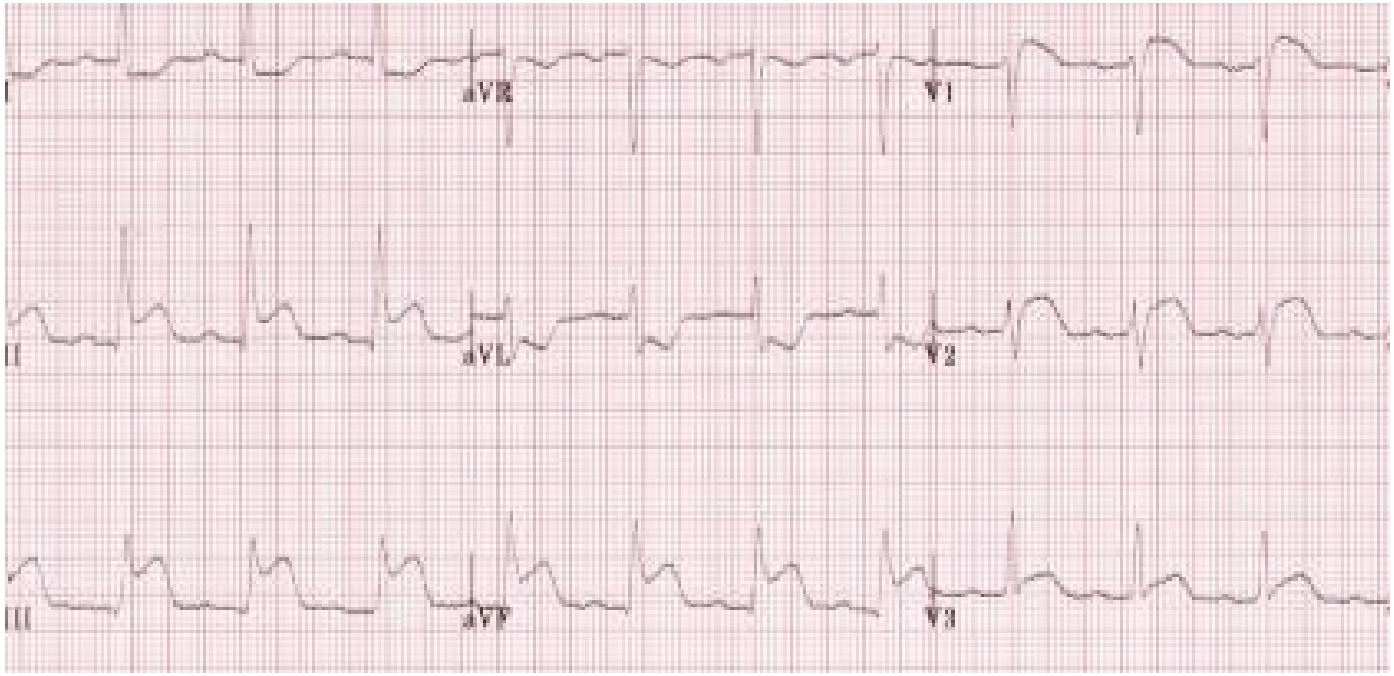
De Winter's T waves—Characterized by ST depression with peaked T waves in precordial leads. Indicative of acute LAD occlusion and a STEMI equivalent.



ST elevation in aVL with flipped T waves in the inferior leads: suggestive of **high lateral MI**. Consider activation of cath lab and maximize medical therapy. Get serial EKGs for evolution of frank STEMI.

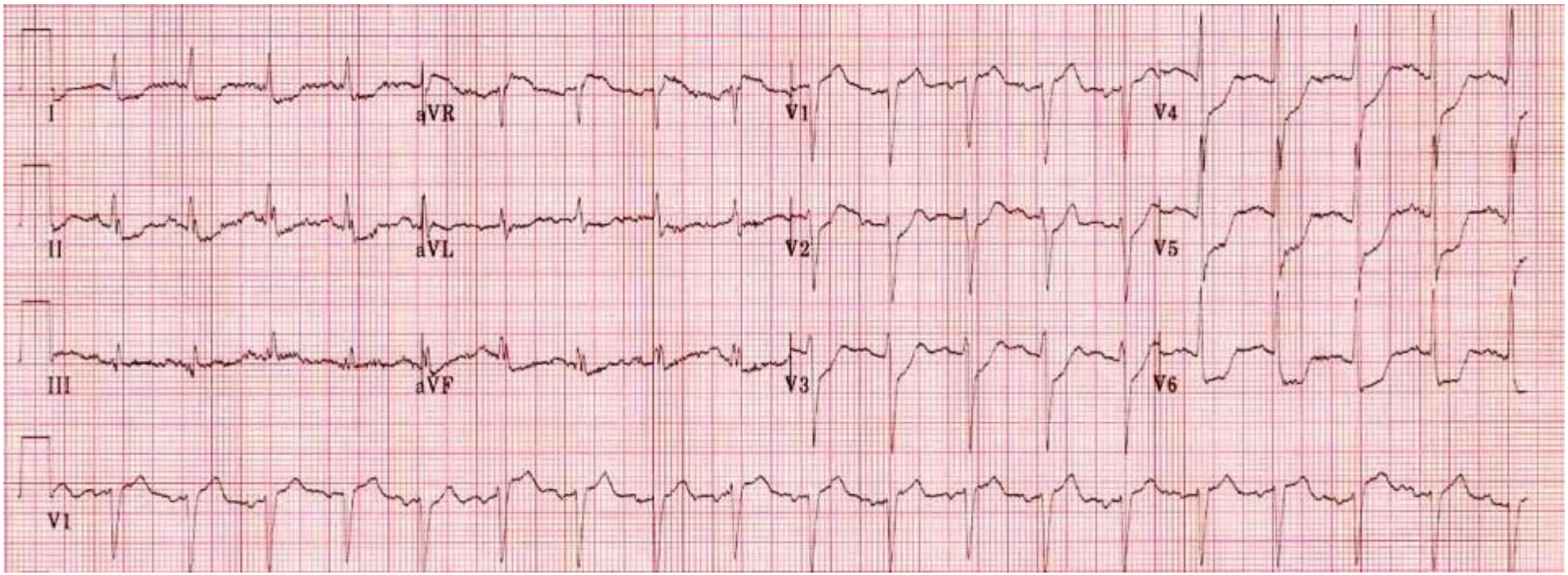
Courtesy of Edward Burns of Life in the Fast Lane

Created by Ashley Deutsch, MD Edited by Nick Hartman, MD & Kristen Grabow Moore, MD, MEd



Inferior lead STEMI with elevation in lead III > lead II or ST elevation in V1: suggestive of **RV infarct**. This is a highly preload dependent state and management should usually involve IV fluid resuscitation and nitroglycerin should typically be avoided. Consider getting a right-sided EKG if you are concerned for RV infarct and want to evaluate for more signs of ischemia.

Courtesy of Susan Torrey, MD of torreyEKG.com



ST elevation in aVR with diffuse ST depression throughout twelve lead: **left main or proximal LAD insufficiency**, hypokalemia, epinephrine effects, or defibrillation. This EKG should prompt consideration of ischemia with an appropriate story, and although it does not meet STEMI criteria, it may be treated similarly if no other cause of these changes are found.