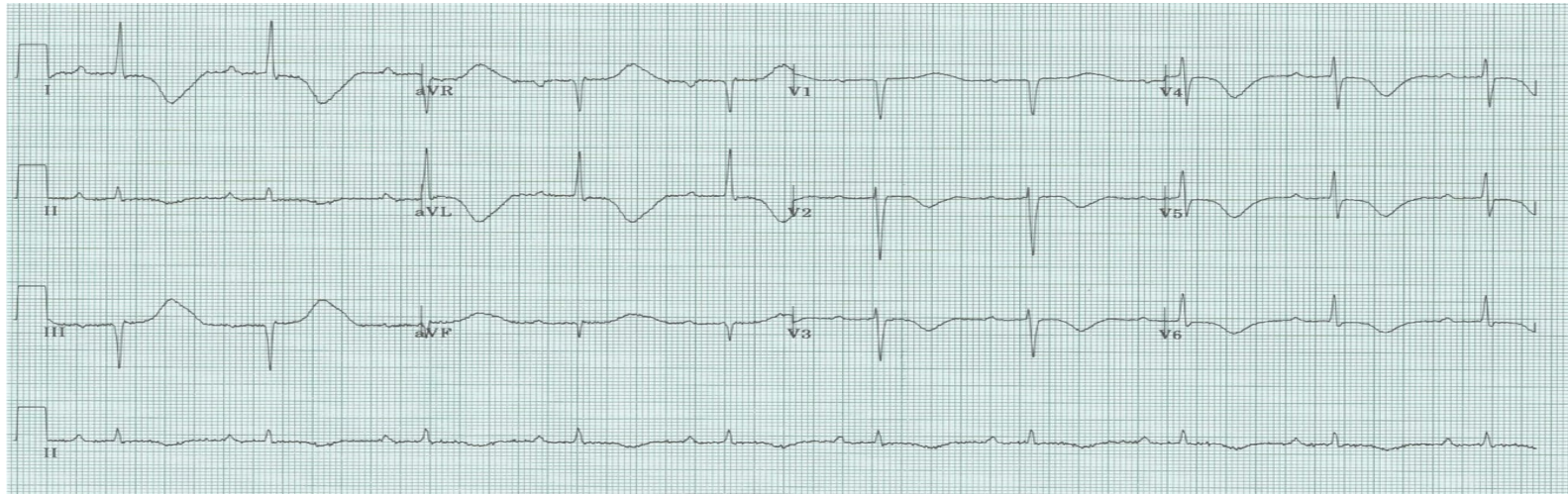




# Foundations EKG II - Unit 9 Summary

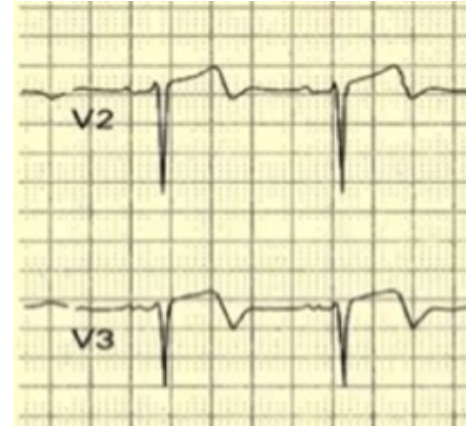
## Miscellaneous Ischemia

Impressive T wave inversion on EKG has a differential diagnosis that includes acute myocardial ischemia among others.



Diffuse T wave inversion can indicate **increased intracranial pressure**. Typically T waves are asymmetric with a bulge. Most commonly caused by intra-parenchymal and non-traumatic subarachnoid hemorrhage but can also be seen with massive ischemic stroke or tumor.

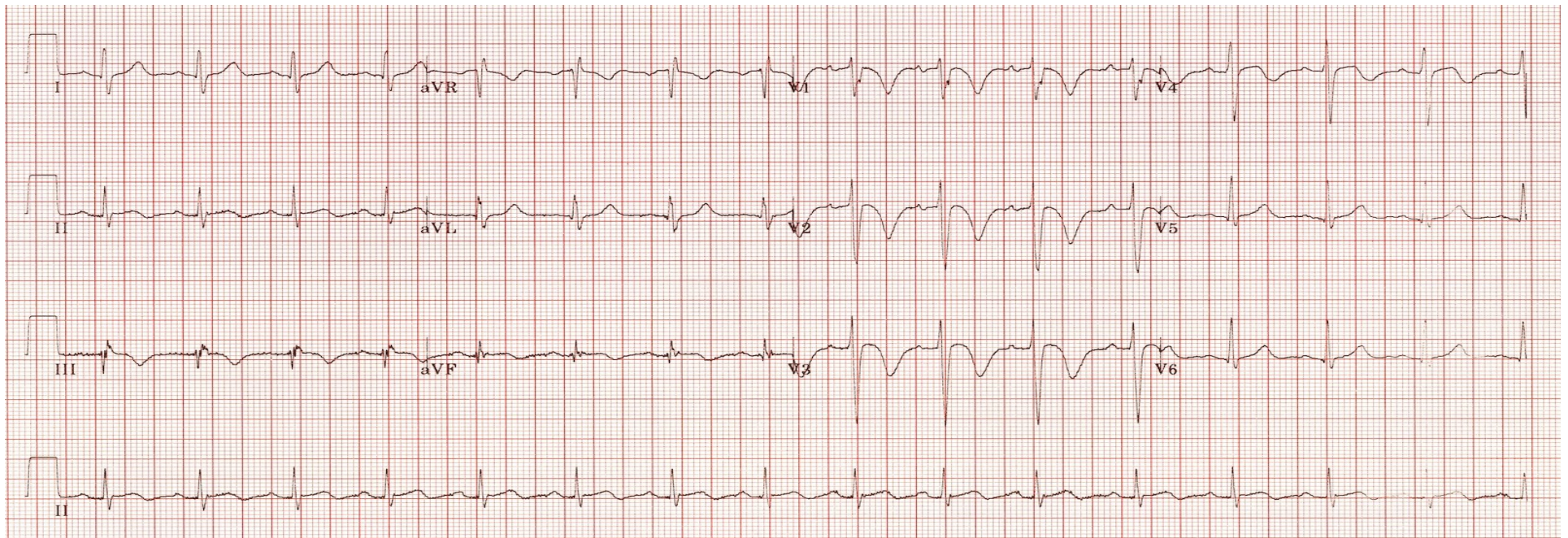
*Courtesy of Susan Torrey of torreyEKG.com*



Deeply inverted T waves or biphasic T waves in V2-V4 during a pain-free interval may represent **Wellens Waves**. Wellens waves may occur with normal enzymes when patient is not having pain, and indicate a left anterior descending (LAD) occlusion. They should prompt a discussion with cardiology about performing cardiac catheterization, although may not need immediate activation if patient is not having active pain. Serial EKGs should be obtained to evaluate for evolving ischemic disease.

*Courtesy of Susan Torrey, MD of [torreyEKG.com](http://torreyEKG.com)*





EKG findings suggestive of **right heart strain**:

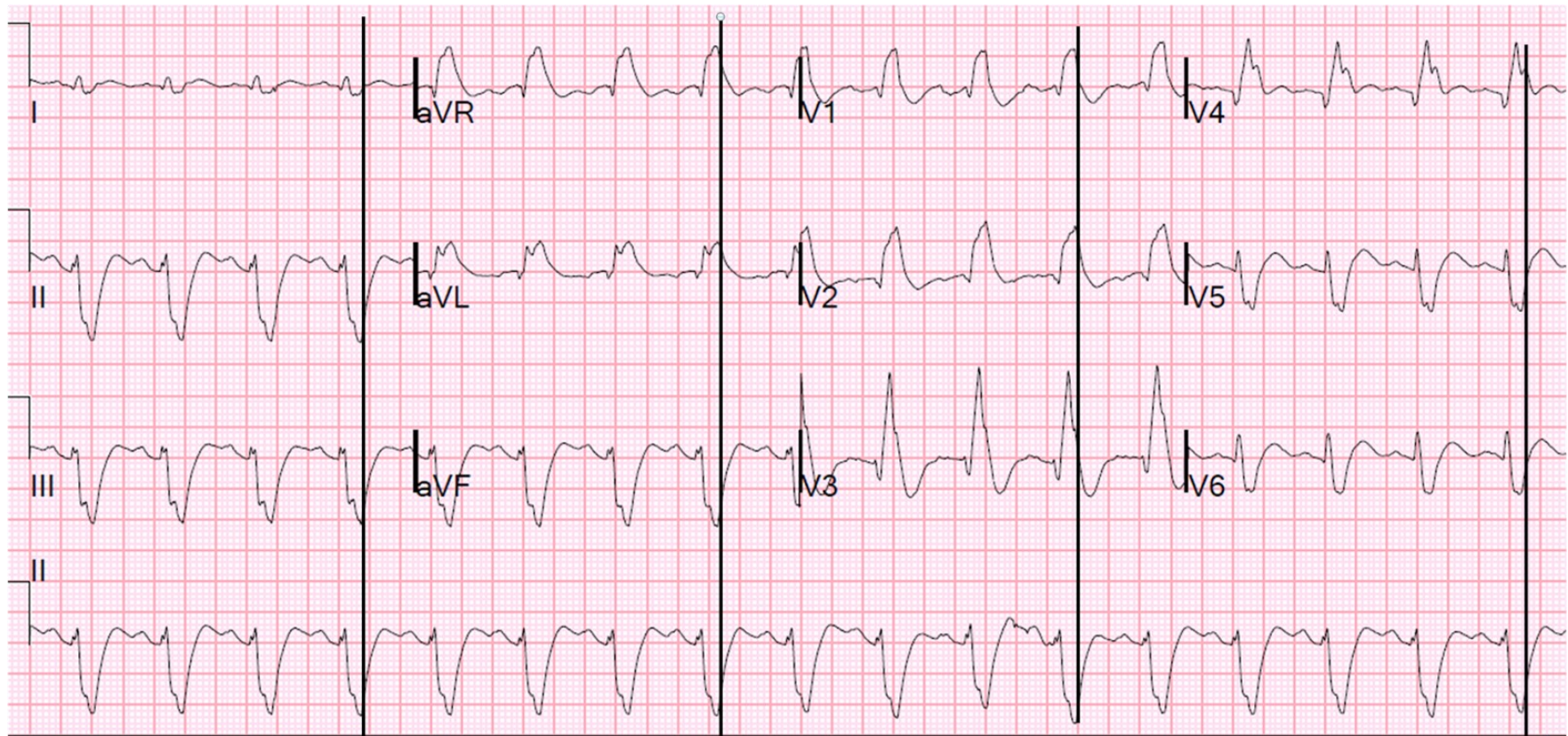
- Right axis deviation
- T wave inversions in inferior and anterior leads
- Incomplete RBBB
- STE with lead III, aVR, V1

Causes of right heart strain includes pulmonary hypertension, pulmonary embolism, mitral stenosis, and chronic lung disease among others.

*Courtesy of Edward Burns of [Life in the Fast Lane](#)*

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A new RBBB with a left anterior fascicular block can be seen in left main and left anterior descending artery occlusion. As a reminder, left anterior fascicular blocks are diagnosed as left axis deviation with small Q waves and tall R waves in leads I and aVL, small R waves with deep S waves in leads II, III, and aVF, and increased QRS voltage in the limb leads. This rhythm (new RBBB+LAFB) is at risk for developing into VT and presenting with cardiogenic shock.

*Courtesy of Steve Smith of [Dr. Smith's ECG Blog](#)*