

CARDIOLOGY

ECG ANALYSIS

Anterior STEMI

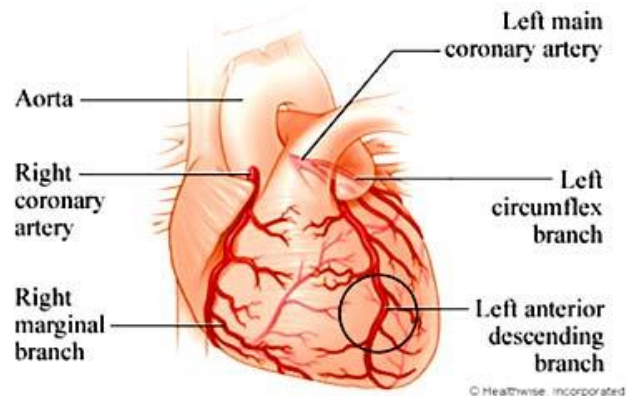
- **Occlusion of left anterior descending artery (LAD)**
- Worst prognosis due to large infarct size
- ST elevation with pathological Q waves in V1- 6 and leads I & aVL
- Reciprocal change inferiorly (ST depression III & aVF)

Precordial lead classification:

- V1- 2= Septal
- V3- 4= Anterior
- V5- 6= Lateral

These often don't occur in isolation, so you may see:

- Anteroseptal= V1- 4
- Anterolateral= V3- 6, I & aVL



Other concerning ECGs for anterior ischaemia include:

- **Left main stem occlusion**

ST elevation in aVR > V1 with widespread ST depression in context of chest pain (**See overleaf**)
Can also represent proximal LAD & 3 vessel disease

- **Wellen's syndrome**

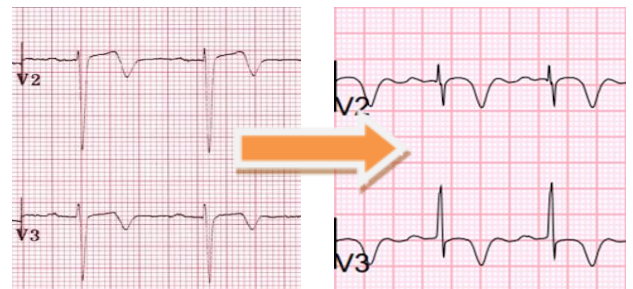
Biphasic T waves or deep precordial TWI V2 & V3 in context of recently **resolved severe chest pain** with normal Trop or small rise.

Occlusion > Re- perfusion

Very high risk for re- occlusion

Can occur in RCA & LCA also

Can occur in vasospasm e.g. cocaine induced chest pain- not high risk feature here



- **De Winter's T waves**

Upsloping ST segment depression >1mm at the J-point in the precordial leads

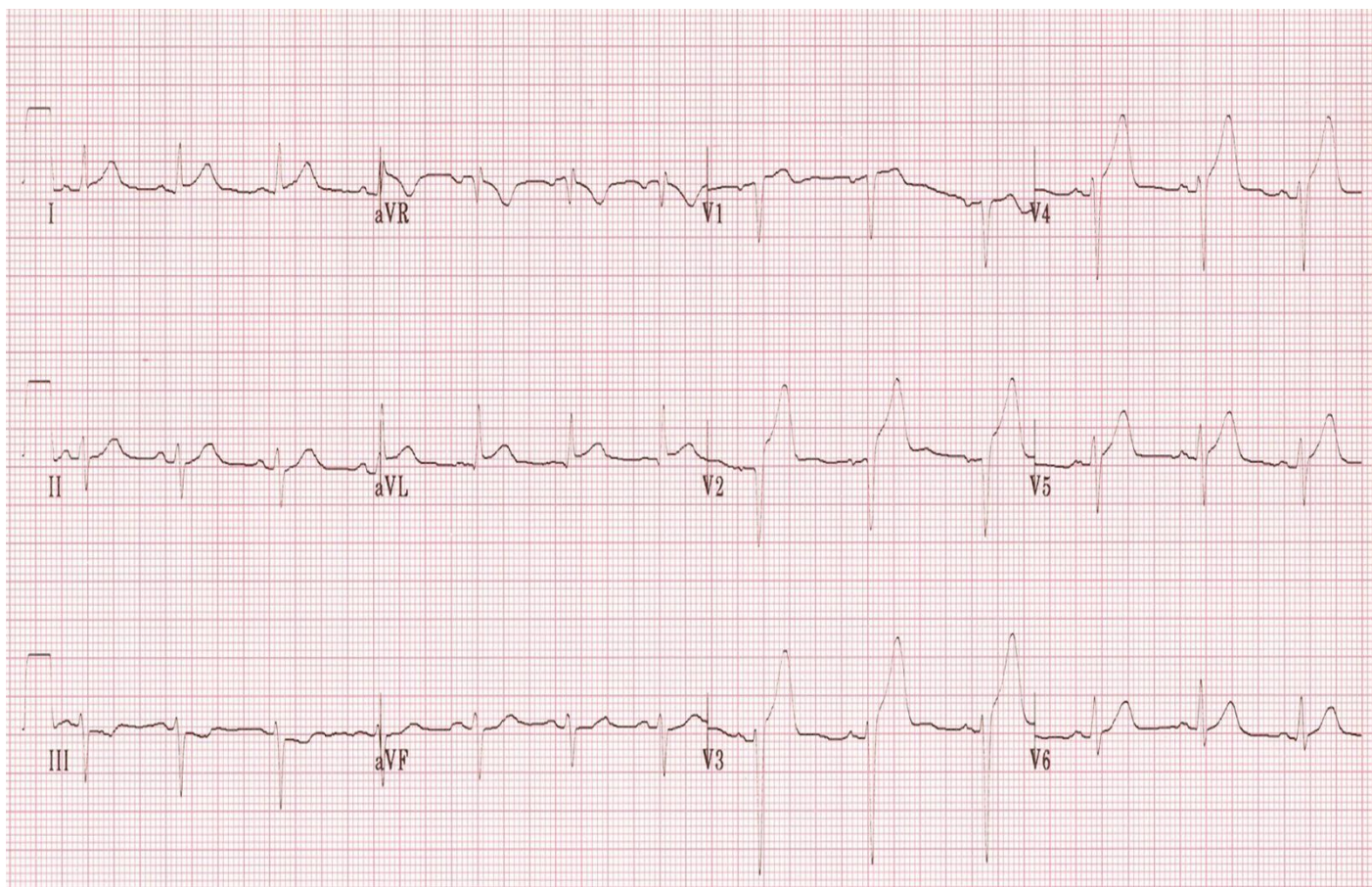
Tall, prominent, T waves in the precordial leads starting below baseline

Absence of ST elevation in the precordial leads

ST segment elevation (0.5mm-1mm) in aVR



Anterior STEMI: STE V2- V5/6 and 'reciprocal' inferior ST depression



Left Main Stem Occlusion: aVR STE > V1 and widespread ST depression

