

# ACUTE MYOCARDIAL INFARCTION



- Acute myocardial injury may present with raised ST.
- Commonly, this is an acute ischaemic injury.
- ST elevation is considered significant when >1mm in the limb leads and/or >2mm in the V leads, in greater than 2 contiguous leads.
- Infarction can present as a pathological Q wave (older sign of full thickness infarction:  $\geq 0.04$ mm wide, and deeper than 25% of the height of the R wave).
- Infarction may also present with T wave changes:
  - inverted
  - large, “hyperacute”.
- ST depression may indicate myocardial ischaemia, and occasionally myocardial infarction.
- ECG changes with reliable or suspicious clinical story may indicate myocardial ischaemia / infarction.

<b>I</b> lateral	<b>aVR</b>	<b>V1</b> septal	<b>V4</b> anterior
<b>II</b> inferior	<b>aVL</b> lateral	<b>V2</b> septal	<b>V5</b> lateral
<b>III</b> inferior	<b>aVF</b> inferior	<b>V3</b> anterior	<b>V6</b> lateral

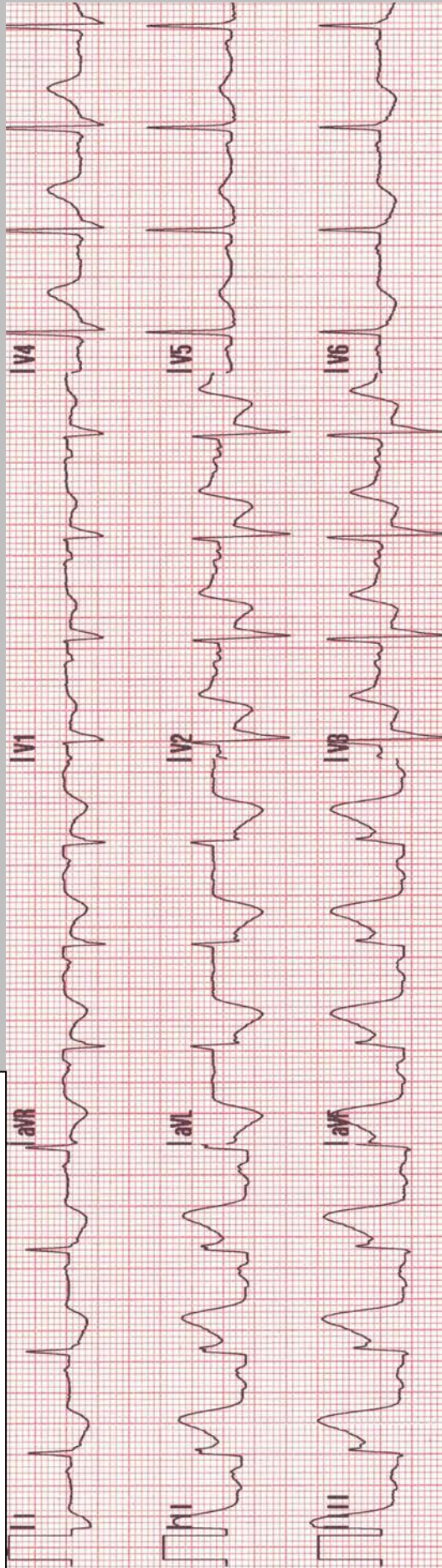
INFARCTION OVERVIEW	
SITE	INDICATIVE LEADS
Inferior	II, III, aVF
Septal	V1, V2
Anterior	V3, V4
Antero-septal	V1, V2, V3, V4
Lateral	I, aVL, V6 (V5)
Antero-lateral	I, aVL, V3, V4, V5, V6
Right ventricular	V3R, V4R, V5R, V6R (usually seen with inferior changes)
Posterior	<b>Reciprocal changes</b> – anterior leads (V3, V4)
	<b>Indicative changes</b> – V8, V9

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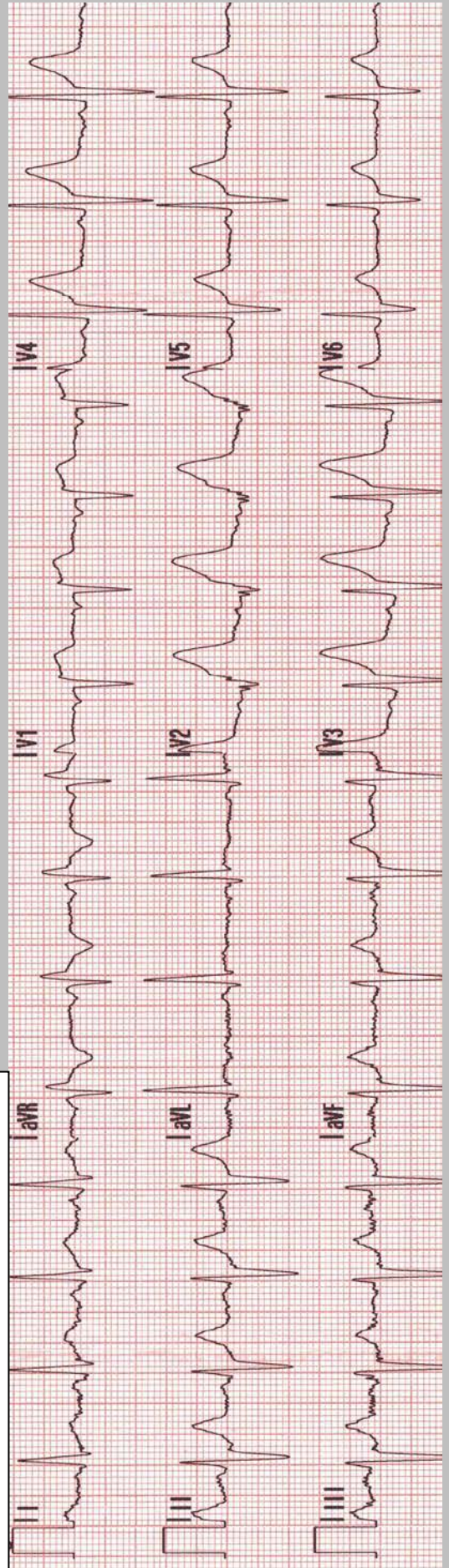




**INFERIOR AMI**



**ANTERO-SEPTAL AMI**

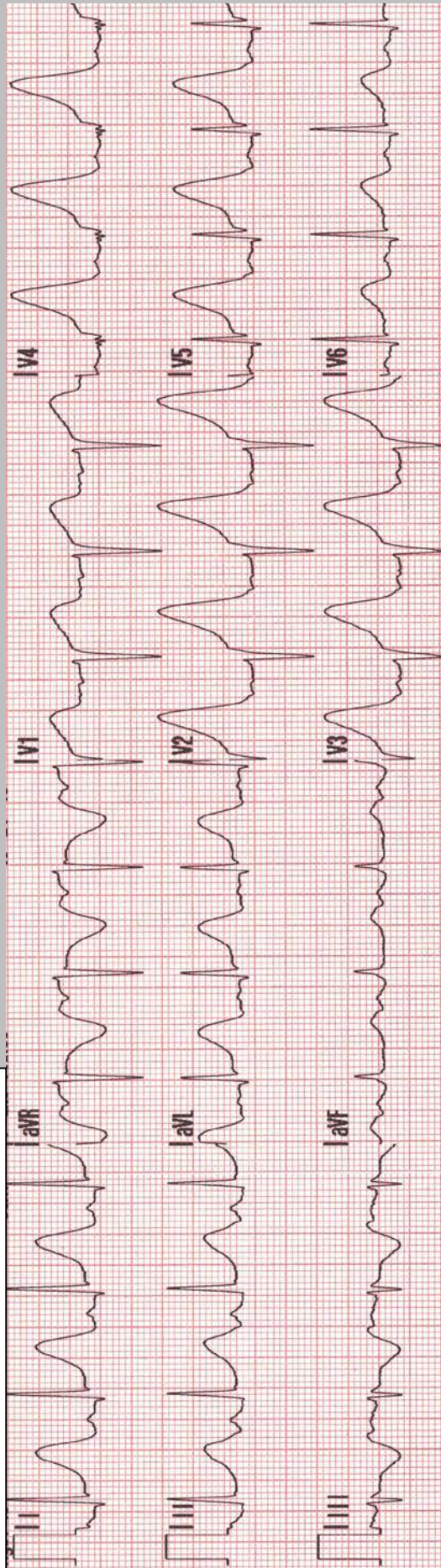


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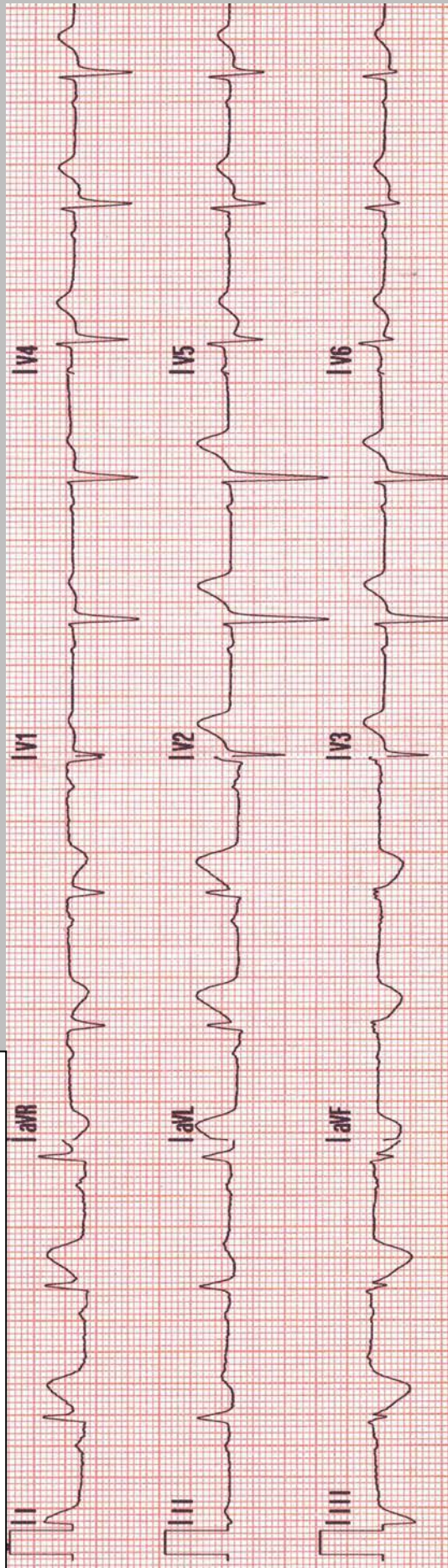




**ANTERO-LATERAL AMI**



**LATERAL AMI**

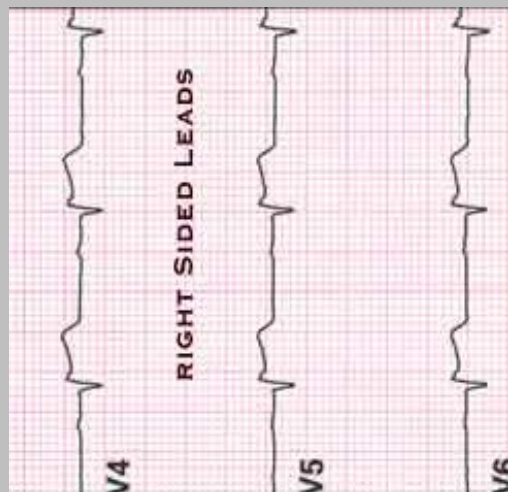
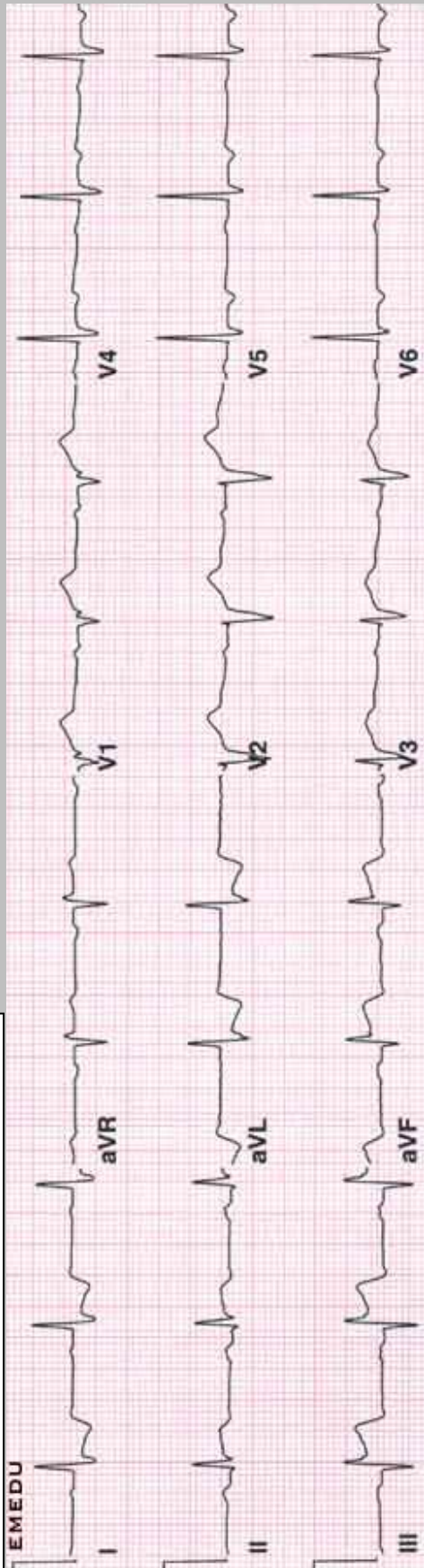


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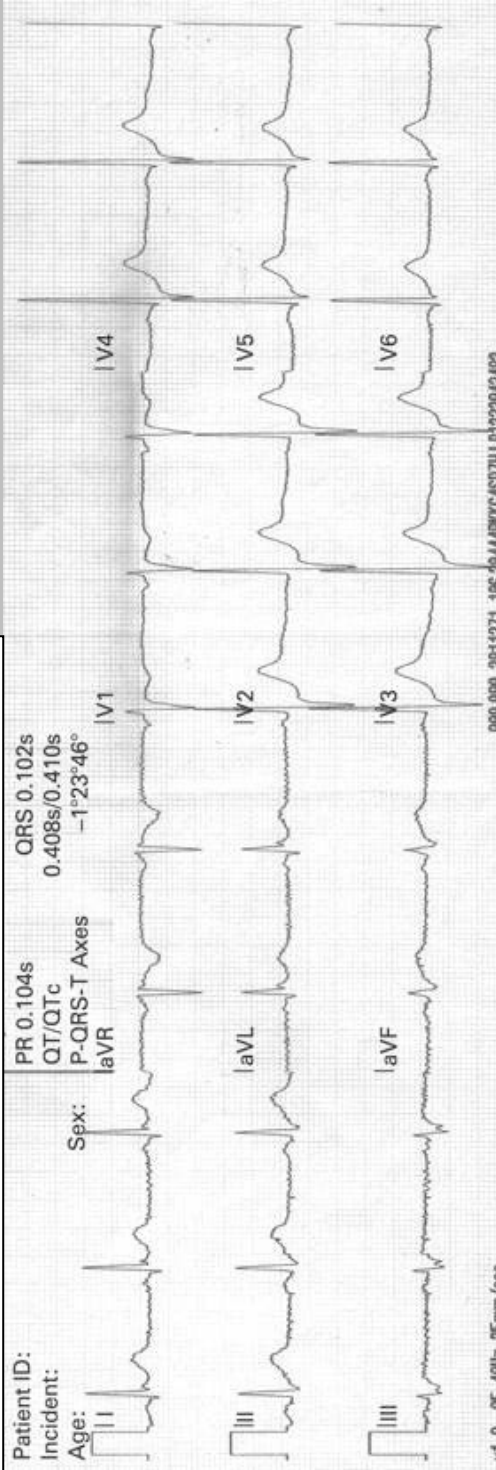
**RIGHT VENTRICULAR AMI**



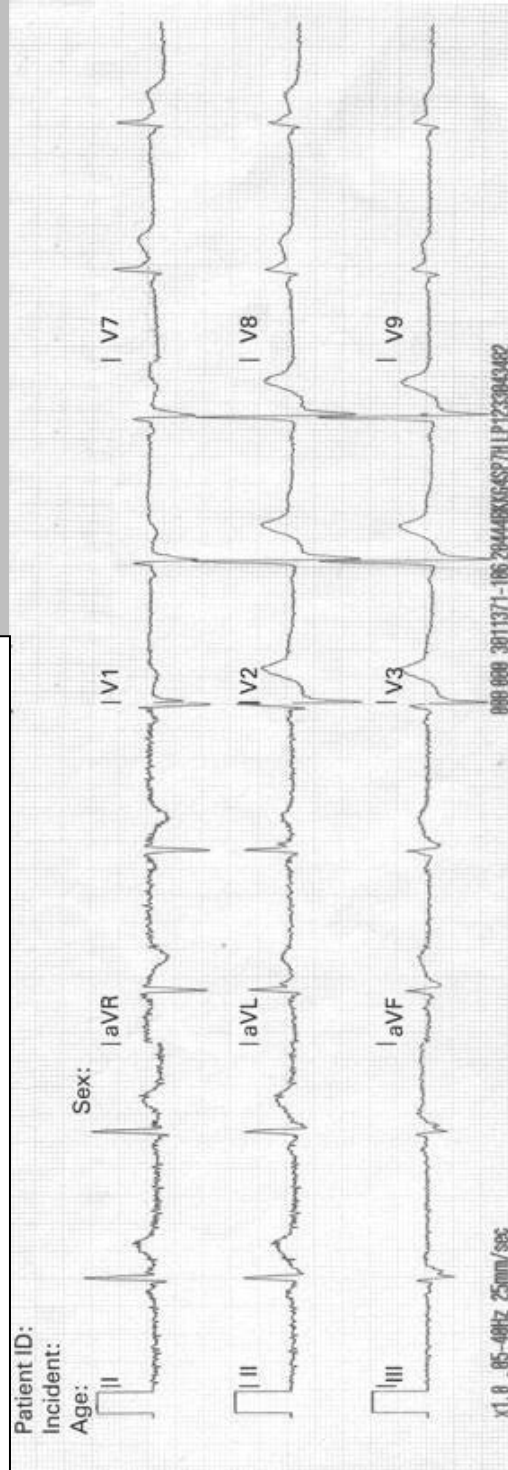
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**POSTERIOR AMI (1): standard 12 lead ECG**



**POSTERIOR AMI (2): V7 – V9 leads**

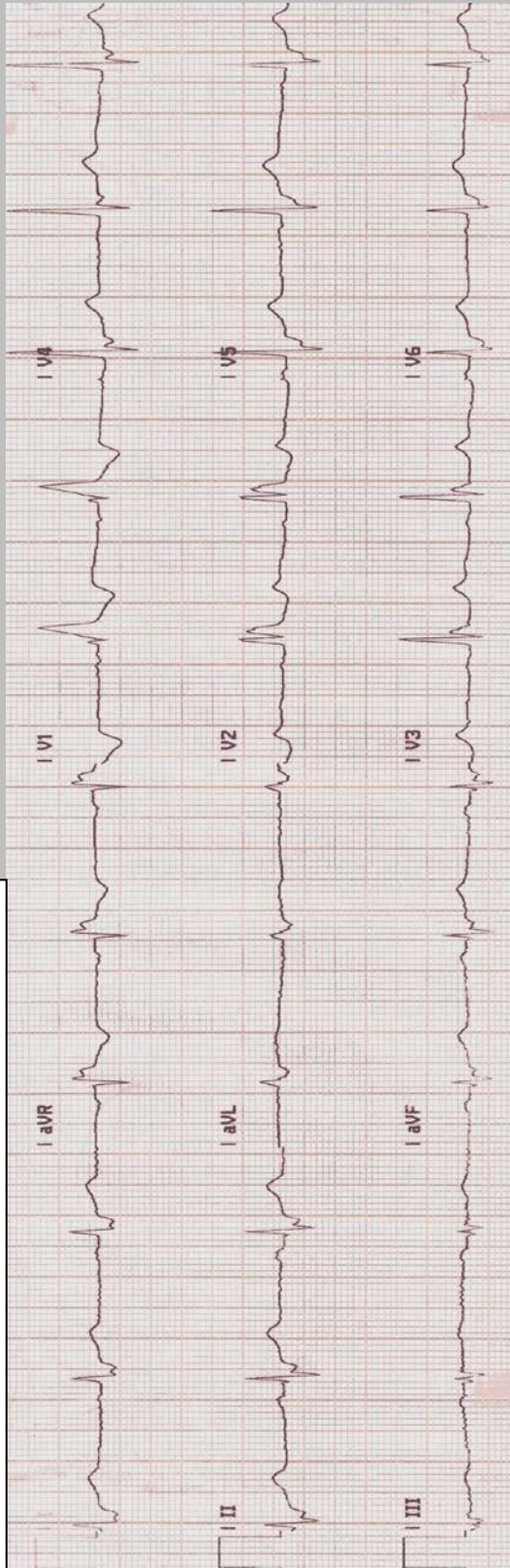


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**RIGHT BUNDLE BRANCH BLOCK**



**LEFT BUNDLE BRANCH BLOCK**

