

EMC 451 Advanced ECG Interpretation

The Normal 12 Lead ECG

EMC 451: The Normal 12 Lead ECG

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Unit Objectives

Upon completion of this unit, the student will be able to:

- Describe the “views” of the 12 lead ECG.
- Describe the sections of the 12 lead ECG printout.
- Identify the QRS morphologies of the normal ECG.
- Identify the R wave progression of the normal ECG.

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Lead Groups

I	aVR	V1	V4
II	aVL	V2	V5
III	aVF	V3	V6

Limb Leads

Chest Leads

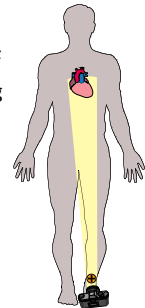
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Inferior Wall

- II, III, aVF
– Left Leg

I	aVR	V1	V4
II	aVL	V2	V5
III	aVF	V3	V6

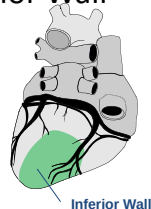


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Inferior Wall

I	aVR	V1	V4
II	aVL	V2	V5
III	aVF	V3	V6



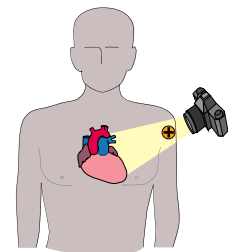
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Lateral Wall

- I and aVL
– Left Arm

I	aVR	V1	V4
II	aVL	V2	V5
III	aVF	V3	V6



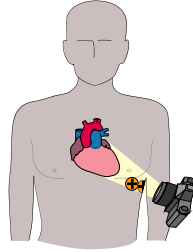
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Lateral Wall

- V5 and V6
– Left lateral chest

I	aVR	V1	V4
II	aVL	V2	V5
III	aVF	V3	V6

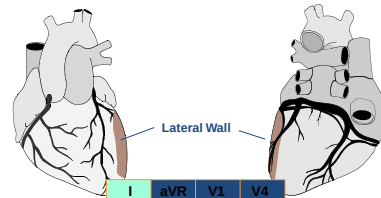


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Lateral

- I, aVL, V5, V6



I	aVR	V1	V4
II	aVL	V2	V5
III	aVF	V3	V6

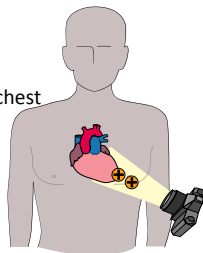
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Anterior Wall

- V3, V4
– Left anterior chest

I	aVR	V1	V4
II	aVL	V2	V5
III	aVF	V3	V6



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Anterior Wall

- V3, V4



I	aVR	V1	V4
II	aVL	V2	V5
III	aVF	V3	V6

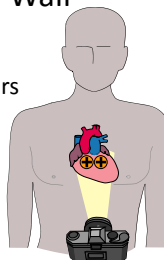
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Septal Wall

- V1, V2
– Along sternal borders

I	aVR	V1	V4
II	aVL	V2	V5
III	aVF	V3	V6



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Septal

- V1, V2



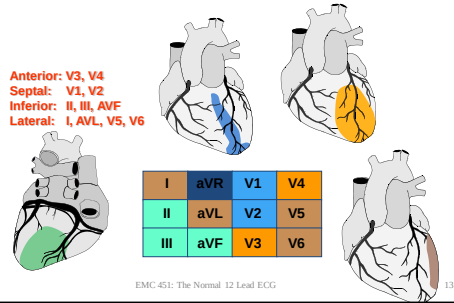
I	aVR	V1	V4
II	aVL	V2	V5
III	aVF	V3	V6

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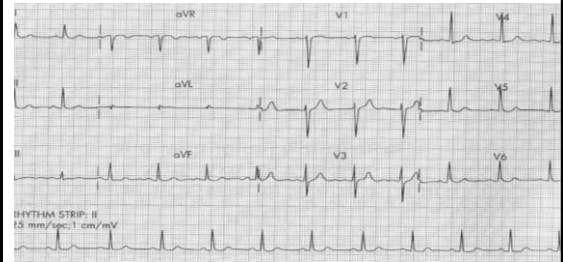
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AMI Localization

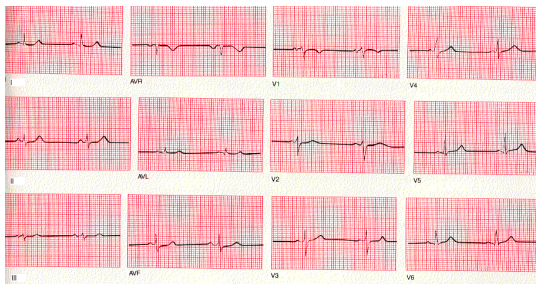
Anterior: V3, V4
Septal: V1, V2
Inferior: II, III, AVF
Lateral: I, AVL, V5, V6



The 12 Lead Printout



QRS Orientation of the Normal 12 Lead



Normal R Wave Progression

