



Indications:

- Patients presenting with:
 - Non-traumatic thoracoabdominal pain
 - Shortness of breath
 - Syncope
 - Dizziness
 - Nausea/vomiting
 - Hypotension/hypertension
 - Tachycardia, bradycardia, and/or palpitations
 - Altered Mental Status

Precautions:

- Obtaining a baseline 12-Lead ECG is preferred before treatment is initiated. However, do not significantly delay treatment and/or transport to conduct test.
- When placing electrodes on female patients, always place leads V3 – V6 under the breast.

Procedure:

1. Prep the skin and shave hair as necessary.
2. Apply electrodes as follows and attach the appropriate lead to each electrode:

Limb Leads: Extremities

(RA) Right arm
(RL) Right leg
(LA) Left arm
(LL) Left Leg

Pericordial Leads: Chest

V1– Fourth intercostal space to the right of the sternum
V2 – Fourth intercostal space to the left of the sternum
V3 – Directly between leads V2 and V4
V4 – Fifth intercostal space at midclavicular line
V5 – Level with V4 at left anterior axillary line
V6 – Level with V5 at left midaxillary line

Considerations:

- Chest Lead Positioning:
 - Locating the V1 position (fourth intercostal space) is critically important because it is the reference point for locating the placement of remaining V leads. To locate the V1 position:
 - Place your finger at the notch in the top of the sternum.
 - Move your finger slowly downward about 1.5 inches until you feel a slight horizontal ridge or elevation. This is the "angle of Louis" where the manubrium joins the body of the sternum.
 - Locate the second intercostal space on the right side, lateral to and just below the angle of Louis.
 - Move your finger down two more intercostal spaces to the fourth intercostal space, which is the V1 position.
- Right Sided 12-Leads:
 - When a 12-Lead is obtained with ST and T wave changes that are highly suggestive of Inferior wall involvement, consider moving Chest Leads V-3, V-4, V-5, V-6 to the exact opposite location on the R side of the patient's chest.