

12 Lead ECG



• Preparing for the procedure

a. Explain the procedure and indications to the patient to gain consent.

b. Position patient in a comfortable supine position.

c. Remove hair with razor if necessary and ensure skin is clean.d. Dispose of razor in the sharps container.

2 Performing the procedure

Attaching leads

a. Apply limb electrodes to hair free sites on wrists and legs.b. Determine chest sites (see image) and apply electrodes to clean hair free sites.

 $\ensuremath{\mathbf{c}}\xspace$. Attach limb leads to limb electrodes and chest leads to chest electrodes.

Recording ECG

a. Calibrate machine according to instructions; Check date and time on the machine.

b. Enter patient details including name, date of birth and record number.

c. Press record ECG button on machine.

Removing electrodes

a. Remove all electrodes and dispose into waste, then clean and dry skin.



Ocumentation

a. Document the procedure and record the result.

4 Additional information

a. The electrode placement should adhere to the recommendations and guidelines as per the American Heart Association (AHA) to ensure consistency between recordings.
b. Adherence to correct anatomical precordial lead placement is important appairable with respect to leads V(1 and V(2 at the second s

is important, especially with respect to leads V1 and V2 at the fourth intercostal space, as variation can produce diagnostically significant differences to the ECG.

References

1. Khunti K. Accurate interpretation of the 12-lead ECG electrode placement: A systematic review. Health Educ J. 2013.

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3. Queensland Health. Adult & Paediatric Resting Electrocardiography (ECG) [Internet]. 2012 [updated 2013 Mar 13; cited 2014 May 15]. Available from: http://www.health.qld.gov.au/qhpolicy/docs/gdl/qh-gdl-387.pdf 4. Tollefson J. Clinical Psychomotor Skills: Assessment Tools for Nursing Students. 5th ed. Melbourne: Cengage Learning Australia; 2012.

5. The Society for Cardiological Science & Technology. Clinical Gudelines by Consensus: Recording a standard 12-lead electrocardiogram: An Approved Methodology [Internet]. 2013 [cited 2014 May 15]. Available from: http://www.scst.org.uk/resources/consensus_guideline_for_recording_a_12_lead_ecg_Rev_072010b.pdf

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Equipment required

- Hand sanitiser
- Razor
- ECG machine
- ECG paper
- Electrodes
- Cleansing wipes
- Sharps container



Correct placement of electrodes for an electrocardiogram



Source: Khunti¹

Please visit the website for more videos and additional information.



http://expertinmypocket.com.au







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