

Procedure #9: Assessing an Apical-Radial Pulse

PURPOSES

- To determine adequacy of peripheral circulation or presence of pulse deficit

Equipment

- Clock or watch with a sweep second hand or digital seconds indicator
- Stethoscope
- Antiseptic wipes

Preparation

- If using the two-nurse technique, ensure that the other nurse is available at this time.

Performance

1. Prior to performing the procedure, introduce self and verify the client's identity using agency protocol. Explain to the client what you are going to do, why it is necessary, and how he or she can participate. Discuss how the results will be used in planning further care or treatments.
2. Perform hand hygiene and observe appropriate infection prevention procedures
3. Provide for client privacy
4. Position the client appropriately. Assist the client to a comfortable supine or sitting position. Expose the area of the chest over the apex of the heart. If previous measurements were taken, determine what position the client assumed, and use the same position.
5. Locate the apical and radial pulse sites. In the two-nurse technique, one nurse locates the apical impulse by palpation or with the stethoscope while the other nurse palpates the radial pulse site

6. Count the apical and radial pulse rates.

Two-Nurse Technique

- Place the clock or watch where both nurses can see it. The nurse who is taking the radial pulse may hold the watch.
- Decide on a time to begin counting. A time when the second hand is on 12, 3, 6, or 9 or an even number on digital clocks is usually selected. The nurse taking the radial pulse says "Start."
- Each nurse counts the pulse rate for 60 seconds. Both nurses end the count when the nurse taking the radial pulse says, "Stop."
- The nurse who assesses the apical rate also assesses the apical pulse rhythm and volume (i.e., whether the heartbeat is strong or weak). If the pulse is irregular, note whether the irregular beats come at random or at predictable times.
- The nurse assessing the radial pulse rate also assesses the
- radial pulse rhythm and volume.

One-Nurse Technique

Within a few minutes:

- Assess the apical pulse for 60 seconds, and
- Assess the radial pulse for 60 seconds.

7. Document the apical and radial (AR) pulse rates, rhythm, volume, and any pulse deficit in the client record. Also record related data such as variation in pulse rate compared to normal for the client and other pertinent observations, such as pallor, cyanosis, or dyspnea.