

B-180 R Manual Percussion and Vibration

Purpose

Loosen and clear secretions retained in the lungs and bronchi.

Applies To

Registered Nurses

Licensed Practical/Vocational Nurses

Other (*Identify*): _____

Equipment/Supplies

- One to four pillows, depending on the client's comfort and posture.
- Comfortable surface that can be slanted (hospital bed, tilt table or chair).
- Glass of water.
- Tissues and paper bag.
- Emesis basin.
- Loose towel or single layer of clothing over chest wall.
- Mechanical vibrator or percussion (optional).

Procedure

1. Wash hands. Refer to the Hand Washing procedure.
2. Perform respiratory assessment to determine areas of congestion.
3. Complete postural drainage as ordered by the physician.
4. Place the client in the appropriate position. Place pillows for support and comfort. (*Refer to Postural Drainage procedure for positioning.*)
5. Instruct the client to relax, take slow breaths, and exhale using abdominal, diaphragmatic, pursed-lip breathing.
6. Elevate bed to working level. Use proper body mechanics when performing. Avoid bending over when performing this procedure.
7. Begin percussion:
 - a. Place cupped hands side by side on the chest wall over area to be drained. *Avoid air leaks by molding hands so that the entire portion of the hand makes contact with the chest wall.*
 - b. Alternately clap chest; rapidly flex and extend wrists to generate a rhythmic popping sound. *Correct procedure technique should sound like a galloping horse.*

- c. Clapping can be done at a moderate or fast pace. Ask if the client is experiencing undue pressure or stinging skin.
 - d. Perform for five to seven minutes without stopping or two to three minutes, alternating with vibration.
 - e. Do not percuss over the spine, sternum, liver, kidneys, or a female client's breasts. *This may cause trauma.*
8. Perform chest wall vibration:
 - a. Place hands flat against the chest wall over the area to be drained.
 - b. Have the client take a slow, deep breath through nose and apply gentle resistance to the chest wall as it rises.
 - c. Have the client briefly hold breath and exhale slowly through pursed lips. The chest wall should relax and fall.
 - d. During exhalation, gently push down and vibrate hands rapidly by tensing arm and shoulder muscles.
 9. Repeat vibration three to five times over each chest segment. Have client perform coughing procedure.
 10. Have the client expectorate any sputum into tissues or emesis basin. If the client is unable to expectorate, suctioning may be required.
 11. Wash hands. Refer to the Hand Washing procedure.

Documentation Guidelines

Document in the clinical record

1. Date, time, and procedure performed.
2. The client's tolerance of procedure.

Policy History

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