

CONNECTICUT VALLEY HOSPITAL

Physical Therapy Services

Treatment Protocol

Re: Postural Drainage

Date: September 14, 2008

Description:

Postural Drainage is a means of clearing the airways of secretions by placing the client in positions so gravity will assist in the flow of mucus. The positions are based upon the anatomy of the tracheobronchial tree, and are designed to drain specific areas of the lungs to larger bronchi and trachea where it can be coughed or suctioned out.

Goals:

To prevent the accumulation of secretions in patients at risk for pulmonary complications.

Indications:

- COPD
- Pneumonia
- Atelectasis
- Post surgical clients who have received anesthesia
- Chronic Bronchitis
- Cystic Fibrosis
- Patients with artificial airways
- Patients on prolonged bed rest

Contraindications:

- Hemorrhage:
 - Copious amounts of blood in the sputum
- Untreated Acute Conditions:
 - Severe pulmonary edema
 - Pleural effusion
 - Pulmonary embolism
 - Pneumothorax
- Cardiovascular Instability:
 - Cardiac Arrhythmia
 - Severe Hypertension or Hypotension
 - Recent Myocardial Infraction
- Recent Neurosurgery:
 - Positions may increase intracranial pressure

Precautions:

- Do not apply:
 - Over bony prominences
 - Over breast tissue in females
 - Over osteoporotic bone
 - Over tumor area
 - If patient has a pulmonary embolus
 - In conditions when hemorrhage may occur
 - Directly following a meal

Preparation of the Patient:

- Have sputum cup and tissues ready
- Have fluids ready
- Have sufficient pillows for positioning and comfort
- Teach the patient deep breathing and an effective cough prior to beginning postural drainage
- If the patient is producing copious amounts of sputum ask him to cough or have nursing suction him prior to positioning
- Choose a time that will be of benefit to the patient; early mornings, and late evenings usually are of the greatest benefit

Frequency:

- 2 – 4 times daily when acute and producing thick copious mucus
- Maintenance is 1 – 2 times per day

Discontinue Postural Drainage if:

- Chest X-rays are clear
- Patient is afebrile for 24 to 48 hours
- Patient is on a regular independent program

Treatment Sequence:

- Check Vital Signs – respiration rate and pulse
- Check the patient's chart daily to evaluate their status
- Determine which segments should be drained; i.e. in CF cases all 12 positions would be required; however, most patients will require only positions directed to the area of lung infiltrates.

Supine:**(Incline)**

- 0° – Percussion applied bilaterally directly over nipple or just above the breast bilaterally
- 15°-30° – ¼ Turn – Percussion just under left breast
- 15°-30° – ¼ Turn – Percussion just under right breast
- 30°-45° – Supine – Percussion over lower portion of ribs
- 30°-45° – On right side – Percussion over lateral aspect of ribs
- 30°-45° – On left side – Percussion over lateral aspect of ribs

Prone:

- 30°-45° – On left side – Percussion bilaterally over lower portion of ribs
- 0° – Percussion bilaterally directly under the scapulae
- 0° – ¼ Turn – Left percussion applied directly over scapulae
- 0° – ¼ Turn – Right percussion applied directly over scapulae

Sitting:

(Or raise treatment table to angle of 150°)

- Reclined backward 15°-30° – Percussion applied under clavicle
- Positioned forward 15°-30° – Percussion applied above scapulae and over shoulders