Postural Drainage and Percussion (PD & P)

PD&P is a treatment done to improve your lung function by removing excess mucus. PD&P can help prevent infection.

Postural drainage (PD) is putting yourself in certain positions so the force of gravity will help drain mucous from your lungs.

Percussion (P) is clapping on your chest with cupped hands. Clapping causes vibrations that helps loosen mucus. Percussion should be done while you are in the positions to drain the mucus from your lungs.

When to do PD & P

- You will need about thirty minutes to complete the treatment. The best time is early morning, before breakfast, to help clear mucus that has built up during the night.
- An hour before bedtime is another good time to do PD&P.
- PD&P should not be done right after a meal. Wait an hour after eating to allow food to digest.
- PD&P should be done ______ times a day.

Doing PD & P:

You will need these supplies to do your treatment:

- Towel
- Pillows
- Your bed
- A chair
- Tissues
- Other ____________________________________________________

What to do:

1. If you have a tracheostomy tube with a cuff, check it before doing PD&P.
   - Your cuff should be:
     - ☐ Inflated during PD&P
     - ☐ Deflated during PD&P
2. **Postural Drainage (PD)**

Position yourself in the first PD position checked (✔️) as shown in the diagrams on pages 3 and 4. You may need help to get into the positions. Get as comfortable as possible.

- If you have a tracheostomy you may need to adjust your PD positions. Your Therapist will show you how to do this.
- If you are on a ventilator:
  - Avoid positions that cause the tubing to pull on your trach.
  - Be careful not to become disconnected from the ventilator.

3. **Percussion (P)**

- Percussion can be done safely by clapping over the ribs. The ribs can be felt through the chest.
- Never percuss over the kidneys, spine or female breasts.
- Do not percuss over bare skin. Use a thin towel to cover the area to be percussed.
- Cup your hands and clap on that area of the chest described on the position diagrams checked (✔️) on pages 3 and 4.
- Percuss quickly and rhythmically, using one hand and then the other.
- Good percussion will make a sound like the galloping of a horse.
- Percuss each area checked (✔️) for _______ minutes.

4. When percussion for one area is done, take deep breaths and cough up the mucus draining from your lungs. The best way to cough up mucus is to use the “huff” method.

- Take in a deep breath then breathe out hard, saying the word "huff" instead of coughing.
- Do 2 - 3 huff breaths and when you feel the mucus in your windpipe or throat, cough up the mucus into a tissue.
- Stop and cough as often as needed during PD&P. Do not let too much mucus build up.
- If you have suction equipment at home, use it if you need to.
5. Go on to the next position and do percussion. Repeat the steps for each position.

6. If you have a tracheostomy tube with a cuff, recheck it when you are finished with PD&P. Your cuff should be:
   - Inflated after PD&P
   - Deflated after PD&P

7. Rest for a short while after PD&P. You will find PD&P easy to do, with practice.

8. Problems rarely occur during PD&P, however, watch for symptoms of dizziness and more difficulty in breathing.

   If any of these symptoms occur, stop the treatment. When you are feeling better, you may try PD&P again. Position yourself with your head higher if necessary. Call your doctor if symptoms continue.

Diagrams of Postural Drainage positions and Percussion areas

Use the positions checked in order, from lower to upper lobes. Percuss over the area of lung marked by the check mark (✓) for each position.

- **Left Lower Lobe**
  - Lie on your right side with your head down and a pillow under your hips and legs.
  - Percuss the left side from the armpit to the bottom of your ribs.
  - Bend your left leg and rotate your body so your chest is pointing down. Percuss the back on the left side from shoulder blade to bottom of the ribs.

- **Right Lower and Middle Lobes**
  - Lie on your left side with your head down and pillows under your hips and legs.
  - Percuss right side from the armpit to the bottom of the ribs.
  - Bend your right leg and rotate your body so your chest is pointing down. Percuss the back on the right side from the shoulder blade to bottom of the ribs.
- **Right and Left Lower Lobes (Back)**
  
  With this position you can drain and percuss both lower lobes at the same time. This position may be difficult for you if you have a trach or are on a ventilator.
  
  - Lie face down with a pillow under your chest and stomach.
  - Percuss on either side of the spine from the shoulder blade to the bottom of the ribs.

- **Right and Left Upper Lobes (Back)**
  
  - Sit in a chair with a pillow in front of your stomach and lean forward.
  - Percuss over the shoulder blades on both sides.

- **Right and Left Upper Lobes (Front)**
  
  - Sit up in a chair with a pillow behind your back and lean back.
  - Percuss over the upper part of both sides of the chest to the nipple. Percuss only to the top of the breast in females.

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Department of Respiratory Therapy  
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