

CHEST PERCUSSION

1. What is the function of chest percussion?

Chest percussion causes the bronchial secretions to release and move from affected areas in the lungs making it easier to have a productive cough. It is more efficient to combine chest percussion with postural drainage.

2. What is the purpose of chest percussion?

- ◆ Move and clear bronchial secretions
- ◆ Increase exercise tolerance
- ◆ Makes it easier to cough and expel bronchial secretions, decreases the amount of mucus and decreases infection rate.

3. When is chest percussion done?

- ◆ One hour after meals to prevent vomiting and aspiration pneumonia.
- ◆ Do not do within 60 minutes of

eating to prevent loss of appetite.

- ◆ Done 3 times or more per day, depending on patient's condition.

4. What tools are used for chest percussion?



Vibrating percussion machine



Silicone percussion cup



Manual, fingers together and positioned like a cup

5. How is chest percussion done?



1. Turn the patient on side facing nurse, keeping side rail up behind patient.



2. Use percussion tool. An x-ray will show the position of mucus secretions in the lungs and this will be the focus area. The percussion

position is mid thoracic, upper back. The postural drainage position improves the effectiveness of chest percussion and will enhance the patient's ability to expectorate (cough) the sputum.



3. Use both hands rhythmically and d position upward so secretions may be expelled. Every area

should have 3-5 minutes of percussion.

6. Caution!

a. Avoid percussion on sternum, spinal cord, abdomen, female breast areas, and other important organ areas such as stomach, liver and kidney.

b. Avoid drainage tube and surgical wound if the patient has chest tube drainage or has had open chest surgery.

c. Stop percussion if the following symptoms appear:

- Cyanosis (blue color of skin)
- Shortness of breath
- Rapid, significant change in vital signs
- Blood-tinged** sputum when coughing

POSTURAL DRAINAGE

1. What is the function of postural drainage?

By positioning the body in certain ways gravity will help drain secretions from lobes in the lung into large bronchioles for sputum to be expelled. Different positions are required for the various areas that congestion may occur.

2. When is postural drainage done?

- ◆ Every day, 3-4 times depending on the patient's condition
- ◆ Before meals and sleep, maintain each position for 5-15 minutes
- ◆ Use humidifier or inhalation before postural drainage. This will make the secretions thinner and postural drainage more effective. Chest percussion may be done at the same time.

3. What are the contraindications for postural drainage?

- ◆ Please stop if cyanosis, shortness of breath, difficulty breathing, weakness, or very ill feeling.
- ◆ Unstable vital signs.

- ◆ Do not do postural drainage on elderly patients or those with heart disease, empyema, or increased intracranial pressure
- ◆ Coughing blood tinged sputum. Postural drainage may be done but not chest percussion

4. How is postural drainage done?

Use pillows or large towels to maintain a comfortable position for the patient. Encourage deep breathing and coughing to expel secretions.

Principles for chest percussion and postural drainage:

- The patient should lie on the side that is opposite from the side that has the greatest density of mucus in lung. For example; Left lobe-----turn patient to right side
Right lobe-----turn patient to left side
(Increase water intake to dilute secretions.)

5. Postural drainage positions

(The position of the patient will depend on where the mucus density is greatest.)

a. Lower lobes, greatest mucus density in middle and lower lobes



b. Upper lobes, greatest mucus density in high part of upper segment.



參考資料：

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CHEST PERCUSSION

POSTURAL DRAINAGE



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給予胸腔拍痰法及姿位引流法護理指導及單張	指導者	病人/ 家屬簽名

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3.Stop percussion if the following symptoms appear:

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胸腔拍擊法(拍痰法) 與姿位引流法



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