



**University
Hospitals Sussex**
NHS Foundation Trust

Information on Percussion Techniques

Physiotherapy department

Patient information

What is this information about?

This leaflet aims to guide you on the use of percussion techniques you have been taught by your physiotherapist.

Be aware

You must not attempt to carry out any techniques that you have not been taught, as this could be dangerous.

Why have I been given this information?

You have been given this information because a physiotherapist has seen you and thought that chest clearance using percussion may help you.

Following the techniques recommended by your physiotherapist can:

- Make breathing easier.
- Reduce mucus buildup.
- Lower the risk of chest infections.

What are the lungs, and how do they work?

Our lungs are important in helping us to get enough oxygen into our bodies to help feed our vital organs (such as our heart and brain) and also to help feed our muscles so that we can move properly.

The lungs are made up of different parts (called lobes) and within these are a vast network of tubes (called airways) which carry our oxygen into the lungs and carbon dioxide out again.

What is phlegm, and why is it important to clear it?

Our lungs make mucus every day to help protect them against infection and to help the oxygen we inhale to travel easily into the blood stream.

However, some people can produce a lot of phlegm (also called mucus) which can be difficult to clear.

Excess phlegm, and a difficulty in clearing it, can often result in repeated chest infections.

Chest clearance will not only help you to breathe more easily but should help reduce the frequency of contracting a chest infection.

Your physiotherapist will assess your chest and your breathing and will then guide you on the best techniques for your specific needs.

They will also advise you on how often they need to be carried out.

How do I know if someone has phlegm to clear?

If someone has phlegm in their airways you may notice:

- An audible 'musical' sound when they breathe.
- A 'rattling' sound when they breathe or speak.
- An increased frequency of coughing.
- A 'vibrating feeling' if you place your hand on their chest.
- Their oxygen levels are lower than normal (for them).
- An increase in agitation or lethargy.

The aims of chest clearance are:

- To help remove phlegm.
- To help the person breathe more easily.
- To help get oxygen into the body more effectively.
- To reduce the occurrence of getting a chest infection.

There are some times when it would not be safe or beneficial to carry out chest clearance techniques for example:

- Bronchospasm or wheeze. Percussion techniques may make these worse.
- Pain. Clearance may be too uncomfortable.
- Shortly after eating or feeds increases the risk of food or vomit passing into the lungs.
- Around the area where drips, lines or ports are inserted.

What do I need to know about comfort and safety?

The caregiver should not bend or lean forward whilst carrying out treatment, but should position the bed or surface at the correct height, allowing them to stay upright and protect their back.

They should remove any jewellery which could cause injury, i.e. watches, bracelets, rings.

Pillows, cushions, blankets, wedges and beanbags can be used as needed to achieve the correct position and ensure comfort.

How can I recognize an infection?

Secretions can be an indicator that the child may have a chest infection.

It is important to keep an eye on what is usual for the person. If you notice any changes in their secretions such as:

- Thicker or harder to clear secretions.
- More secretions: increased need for suction.
- A change in colour: darker, green, orange or yellow.
- Smelly secretions.
- Associated symptoms such as fever, lethargy, irritability, or increased coughing.

What is the action plan for chest clearance?

1. Loosen phlegm.
2. Position the patient to help move the phlegm.
3. Carry out appropriate techniques shown by your physiotherapist to help move the phlegm.
4. Remove secretions (for example: spit out, wipe away, suction away).

What should I do before using percussion?

- Do percussion technique before meals or at least one hour after eating. This will make it less likely that you will feel sick to the stomach or vomit.
- The best time for percussion technique is early morning and before you go to bed at night.

- Early morning percussion technique will help remove the sputum that built up over night. Bed time percussion technique takes out the mucus of the day, and helps you cough less at night. You may want you to do it more often if advised by your physiotherapist.
- Place a towel on the area you want to percuss.
- Gravity assisted positioning uses different body positions to help the drainage of secretions from particular areas of the lungs and also helps to increase the air movement or ventilation to different parts of the lungs.
- Your physiotherapist may advise lying on either side, front, back or sitting.

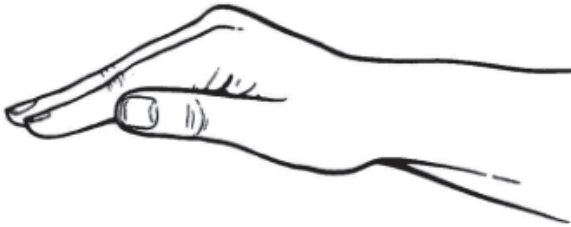
How do I perform the percussion technique?

- Get the person into position required.
- Always percuss over the ribs with a cupped hand. The lungs are in the chest, protected by the ribs. Never percuss below the ribs, on the stomach, backbone, breast bone, nipples or on any tubes around the chest area or feeding tubes.
- Percuss at the rate of 1 to 2 per second.
- Do percussion in each spot for 1 to 2 minutes.
- Do percussion in all positions so that you cover all areas of the lungs on both sides.
- Your physiotherapist may advise you do more in some areas, where there is evidence of more mucus.
- Use in conjunction with suction if required.

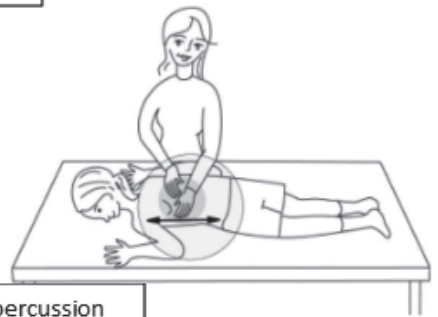
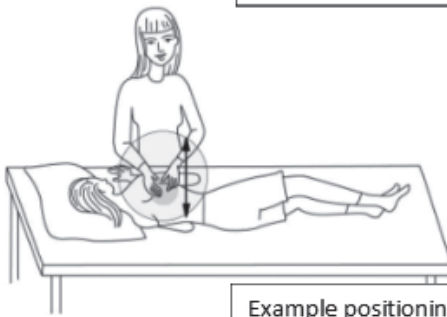
Be aware

If you have any adverse reaction, stop using the percussion technique and seek medical advice.

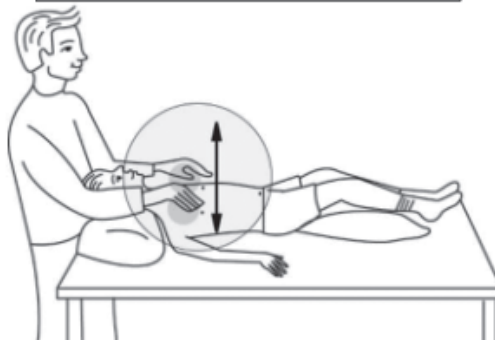
Please use this technique only if assessed and advised by a physiotherapist.



Example of cupped hand



Example positioning for percussion



My chest physiotherapy prescription

Name:

DOB:

Hospital Number:

The techniques that my physiotherapist has taught me are:

My chest Physiotherapy should be carried out _____ times per day for _____ minutes. If you are unsure, or need further advice please do not hesitate to contact your physiotherapist.

Contact details

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