



PATIENT INFORMATION

PAEDIATRIC CHEST CLEARANCE



What are chest clearance techniques?

Chest Clearance Techniques help to loosen and move excess mucus or sputum into the upper part of the airway so that it can be cleared more easily by coughing or suction. They are especially useful when the cough is weak. Keeping the airways as clear as possible helps to make breathing easier, reduces infection and keeps the lungs healthy.

The techniques of **Postural Drainage**, **Percussions** and **Vibrations** can be used routinely to help keep the chest clear, or when excessive secretions are causing respiratory distress and making breathing difficult. The signs of excessive secretions may include:

- Audible rattling in airways
- Increased breathing rate
- Increased breathing effort
- Palpation – feeling the chest for presence of secretions
- Colour of face and lips - pale/red/blue
- Irritability/discomfort/pain
- Colour of body/limbs
- Altered Oxygen saturations/requirements

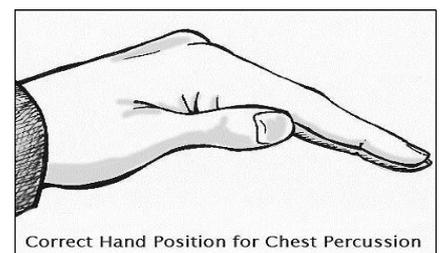
What is Postural Drainage?

This simply means putting the lungs into a position where gravity helps to drain the mucus into the larger, upper airways ready for coughing/clearing. The part of lung to be cleared is placed uppermost. As the lungs have different sections, several different positions may need to be used.

Once the patient is in an appropriate position, percussion and vibrations can be added to improve drainage and clearance.

What is Percussion?

Percussion on the chest wall over the part of lung to be drained helps to dislodge the mucus and move it into the larger airways. Using a cupped hand with the palm facing down softens the percussion by trapping a cushion of air. Percussion should not be done over bare skin and the use of a single layer of towel/ blanket over the area is recommended. This means that it should never be painful and, if done correctly will produce a hollow sound.



Percussion should be rhythmical and can be done using fingers or your hand. Your physiotherapist will advise you on the best technique to use. The movement should be mostly from the wrist, with the arm relaxed. Care should be taken to avoid percussion over the spine, breastbone, stomach or lower ribs.

This can be carried out for 3—5 minutes in each position needed, and can be followed by vibration over the same area.

What are Vibrations?

Vibrations help to shake the mucus into the larger airways, and are most helpful when combined with some deep breathing by the patient. By placing both hands firmly against the part of the chest being cleared, the caregiver then applies a fine shaking motion as the patient breathes out fully and for as long as possible.

Coughing is vital to finally clear the loosened mucus from the airways. The patient can cough at any time during the clearance routine and should also be encouraged to cough and clear any mucus at the end.

How long should physiotherapy take and how often?

As postural drainage/percussion/vibrations may be needed in 1 or several positions, treatment can take between 10 and 20 minutes. It may also need to be repeated several times during the day (Avoid for 1-2 hours after feed/meal).

When your child is well times a day

When your child is showing signs of infection or are unwell,times a day

If your child uses inhalers or nebulisers:

You should give before chest clearance

You should giveafter chest clearance

Other nebulised medication should be taken.....

Cautions:

There are some times when it would not be safe / beneficial to carry out chest clearance techniques

- Bronchospasm/ Wheeze – percussion may make this worse
- Pain – clearance may be too uncomfortable
- Shortly after eating/feeds- increases the risk of food/vomit passing into the lungs
- Around the area where drips/lines/ports are inserted.

Comfort/Safety

The caregiver – should not bend/lean forward whilst carrying out treatment, but should position the bed/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/beanbags can be used as needed to achieve the correct position and ensure comfort.

The child- should wear loose comfortable clothing and have access to sputum pots/tissues for secretions.

It can be difficult to get children to cooperate with their chest clearance routine but it **IS** important that it is done regularly. You could try:

- Physio around a favourite TV show
- Play songs/stories
- Encourage blowing games (Blow pens/bubbles/windmills/tissues)

Recognising Infection

Secretions can be an indicator that the child may have a chest infection. It is important to keep an eye on what is **NORMAL** for the child.

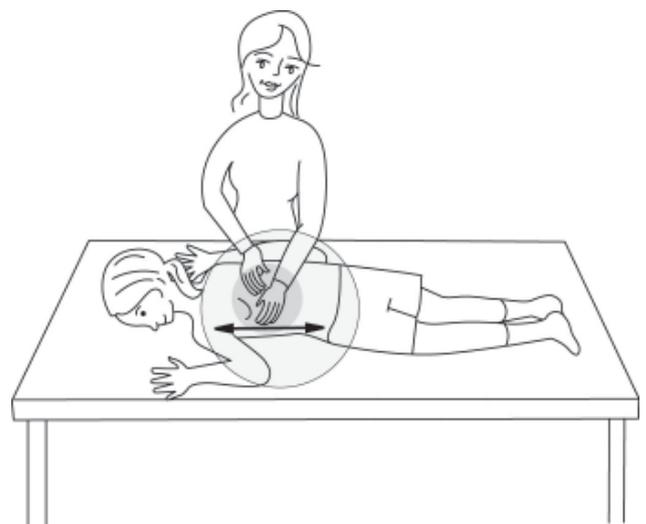
If you notice any changes in their secretions e.g:

- Thicker/harder to clear secretions
- More secretions – increased need for suction
- A change in colour – darker/green/orange/yellow
- Smelly secretions

....Normally coupled with a change in the child e.g:

- Irritable
- Sleepy
- Temperature
- Flushed
- Coughing

It may mean that a sputum specimen should be sent to your GP to see if antibiotics are required.



Contact details

If you have any specific concerns that you feel have not been answered and need explaining, please contact the following.

Physiotherapist

Contact details.....

Other information

The following internet websites contain information that you may find useful.

- www.worcsacute.nhs.uk
Worcestershire Acute Hospitals NHS Trust
- www.patient.co.uk
Information fact sheets on health and disease
- www.rcoa.ac.uk
Information leaflets by the Royal College of Anaesthetists about 'Having an anaesthetic'
- www.nhsdirect.nhs.uk
On-line health encyclopaedia

If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PET@nhs.net

Opening times:

The PALS telephone lines are open Monday to Thursday from 8.30am to 4.30pm and Friday: 8.30am to 4.00pm. Please be aware that a voicemail service is in use at busy times, but messages will be returned as quickly as possible.

If you are unable to understand this leaflet, please communicate with a member of staff.