



Airway Clearance Physiotherapy

Airway clearance is an essential part of the treatment routine for people with CF. Performing regular airway clearance helps loosen the thick, sticky mucus from the airways so it can be cleared more easily with huffing and coughing.

Why do I need to do airway clearance?

Removing mucus from the airways is important to reduce the risk of infections, or exacerbations, and prevent permanent lung damage. If the mucus stays in the airways it provides a breeding ground for germs and bacteria.

When should I start airway clearance?

Airway clearance is usually started at the time of CF diagnosis. This is important as it helps establish good routine and prevent build-up of mucus in the lungs. Some families may take longer to start airway clearance as other issues may be more of a priority. Your CF team will make this decision.

Parents will be taught how to do airway clearance with their child by their specialist CF physiotherapist. As they get older, children will become more independent, so they are eventually able to carry out their own airway clearance.



How often should airway clearance be done?

It is recommended that airway clearance is performed every day, depending on your individual program. The primary care team at your CF centre will work with you to decide the frequency of treatment each day. The number of sessions per day may increase when unwell.

How long does it take to do airway clearance?

The length of time taken to complete airway clearance will vary depending on the technique chosen, the amount of mucus and how well you or your child is.

Airway clearance may take longer when you are unwell as there may be more mucus to clear or it may be thicker and more difficult to clear.

What are the different types of airway clearance?

There are lots of different airway clearance techniques and your specialist CF physiotherapist will help create an individualised program that best suits your/your child's health. Airway clearance can be combined with exercise to enhance mucus clearance.

Positioning and Percussion

Uses positioning and patting with a cupped hand on your child's chest to loosen

and clear mucus. Most commonly used in babies and young children when active participation in airway clearance is not possible.

Positive Expiratory Pressure (PEP)

PEP devices provide resistance when breathing out, to splint open airways and get air behind mucus plugs. The aim is to move mucus upwards in the airways, towards the mouth so it can be more easily cleared. There are many different PEP devices including mouthpiece PEP, PEP mask, flutter and bottle PEP.

Active Cycle of Breathing Technique (ACBT)

ACBT combines deep breathing, relaxed breathing and huffing and coughing in a cycle to help clear mucus from the lungs. It can be done in a variety of positions, with or without percussion.

Autogenic Drainage (AD)

AD is a controlled breathing technique that involves breathing at different lung volumes to move mucus from the small airways to the larger airways.

Support

Airway clearance is essential for all people with CF. The type of treatment, number of sessions and length of treatment will vary for each individual. Make sure you discuss your options with your CF specialist physiotherapist. If you would like support with airway clearance routines at home, please contact CFWA on services@cfwa.org.au.

Useful Resources

- Airway Clearance Therapy (CF Physio)
- CF Physio 4 Kids (CF Physio)
- Airway Clearance Factsheets (CFWA)
- Support Programs (CFWA)

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