

Airway Clearance Techniques: Autogenic Drainage

What are Airway Clearance Techniques?

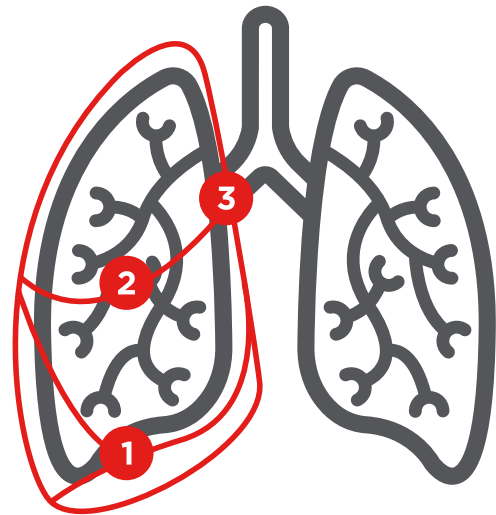
Airway Clearance Techniques (ACTs) are an essential part of management for people with cystic fibrosis (CF). Performing regular airway clearance helps loosen the thick sticky mucus from the airways so it can be cleared more easily. Autogenic drainage (AD), or self-drainage, is an airway clearance technique that is widely used in European CF centres and increasing in use in Australia.

What is 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. It aims to maximise airflow on the breath out while also avoiding wheeze and airway collapse, so mucus is more easily removed. You will be instructed to suppress your cough during the technique to prevent airway closure.

AD can be adapted to suit your needs and can be done in either modified postural drainage positions or sitting. It requires a great deal of concentration and intuition, and it may take some time to learn the technique. Each AD routine will be different and should always be taught by a CF specialist physiotherapist.

There are three general stages of AD. How long you spend in each stage and the volumes you breathe will be determined by you and your specialist physiotherapist.



Stages of AD

Stage 1 targets the mucus in the smaller airways by breathing at the base of the lungs. This is achieved by taking small breaths at low lung volumes.

Stage 2 involves breathing in the low to mid part of the lungs to collect the mucus that has been mobilised

Stage 3 removes mucus from the large central airways by breathing in the mid to high part of the lungs. Mucus can then be cleared by huffing or with a cough.

Useful Resources

- [AD \(Bronchiectasis Toolbox\)](#)
- [AD \(CF Foundation\)](#)
- [CFWA Airway Clearance Factsheets](#)

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