

# Autogenic Drainage

Information for patients



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Autogenic drainage is an airway clearance technique that involves changing your breathing to aid secretion clearance without equipment.

## How does Autogenic Drainage work?

Autogenic drainage (AD) works by changing your breathing and maximizing airflow within your airways to improve ventilation and clear sputum. Your breath out is like a sigh, with the air moving out your mouth as fast as possible but not too forceful that a wheeze is induced.

## The AD technique:

### Breathing in:

- slow medium breath in through your nose. If it is too fast the out breath won't be as effective
- Hold the in breath for around 3-4 seconds, this allows the air to completely fill your lungs and access to deeper airways

### Breathing out:

- Fast sigh out; try not to force air out too hard. Aim for a steady flow of air as if you're gently steaming up a mirror/window
- Whilst sighing out you should listen for crackling, gurgling or rattling sputum. It can take several breaths in and out breaths before it becomes audible

- Hearing the sputum indicates it is moving through your lungs and up to your throat. It should get louder and deeper as it moves higher
- If you are hearing a wheeze rather than a rattle/gurgle then you are squeezing out too hard

## How to complete an AD treatment?

### Preparation:

- Prior to starting take any nebulisers or inhalers (as prescribed) to prepare your airways
- Blow your nose and huff or cough to clear any mucous that may be sat at the back of your throat
- Relax in to a comfortable position- your physiotherapist will guide you on this
- Ensure you stay hydrated throughout the day, this will keep your sputum looser and easier to clear

### The test breath:

- Relaxed normal breathing
- Take a deep AD style in breath (as previously described), hold for 3-4 seconds to fill the lungs completely
- AD breath out (as previously described), emptying your lungs fully. Push gently with your tummy muscles near the end of the breath.

- If you hear crackles at the beginning of the breath the sputum is almost ready to be cleared. Try a huff or a cough.
- If the crackles are quiet, high pitched or heard at the end of the out breath, the secretions are deeper in the lungs.

## Moving the sputum:

- Following on from your test breath, you should continue with the previously described technique.
- Ensure you are completely emptying your lungs without wheezing. This will start to move the sputum deep within your lungs.
- Continue this gradually taking deeper breaths until the crackles get louder. You won't need to empty your lungs each time as the sputum will move higher up your airways.
- Placing your hands on your chest will help you feel the crackles as well as hearing them.

## Coughing:

- Try to resist the urge to cough for as long as possible, take yourself back to normal breathing if the urge is hard to suppress. This allows for a larger amount of sputum to be cleared in one go.
- One or two effective huffs or coughs should clear the sputum.
- Rest for a few minutes after you cough or wait till your breathing is back to normal. Then repeat the AD cycle from the beginning

- Repeat until your chest feels as clear as possible (no crackles)
- Use your inhalers or nebulisers after your airway clearance (as prescribed)

It is recommended to do this in conjunction with daily physical exercise as this will help move sputum from deeper within your lungs and will help keep you fit and healthy.

**If you have any questions please contact your Physiotherapist**

**Paediatric Cystic Fibrosis and Respiratory unit**

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# Notes



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