



Royal Papworth Hospital
NHS Foundation Trust

Autogenic drainage (AD)

A patient's guide

What is Autogenic Drainage (AD)?

- AD is a respiratory self-drainage breathing technique that uses controlled breathing at different lung volumes to move secretions from targeted airways.
- It is characterised by breathing control whereby the individual adjusts the rate, depth, and lung volume of their breaths. It can be individually adapted to diagnosis and lung function.
- AD uses the principles of 'unstick, collect, evacuate' to move secretions through lung volumes/airways.

The aim

To reduce coughing; resulting in decreased forward trunk postures, improved breathing and a reduction in pain and urinary stress incontinence.

- To create maximum possible airflow when breathing out in different lung volumes with an **active**, but **not forced**, breath out.
- To move secretions from outer small airways into central larger airways as you breathe- from feeling your lungs are completely empty through to when you feel your lungs are full.
- AD can lower energy expenditure and reduce airway collapse from forced expiration.

Tips

- Listen and feel for signs of secretions/crackles.
- Breathing should be gentle and relaxed - sighing and not forced.
- Think about breathing from empty to full lung volumes as required.
- Use a controlled huff or cough for expectoration.
- You may combine AD with other airway clearance devices or inhalations such as nebulisers or non-invasive ventilation.
- Repeat the process below at least three times but continue until your lungs feel clear and you cannot hear/feel any secretions.
- Use the technique twice a day.

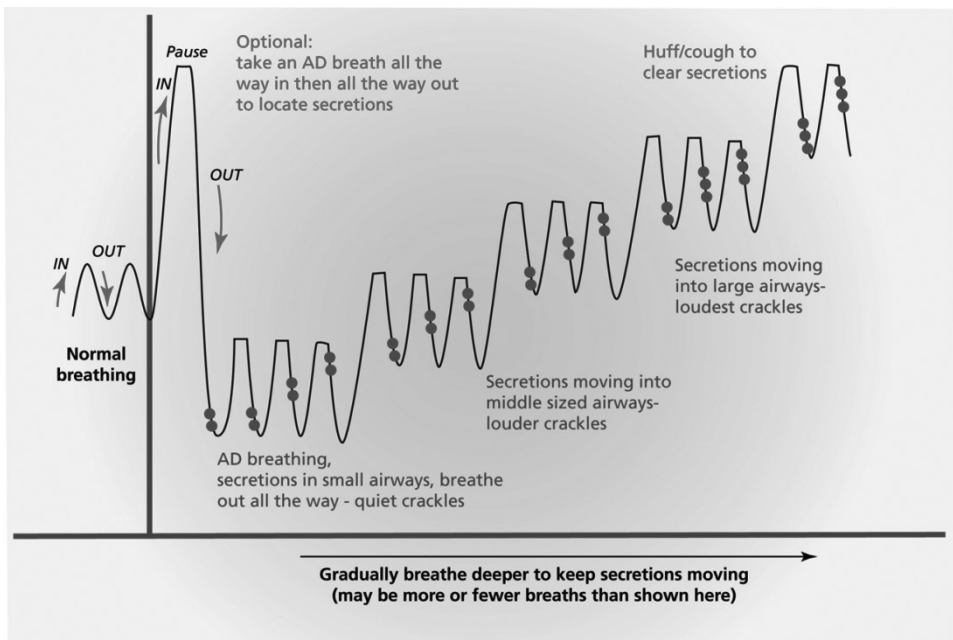
Preparation

- Drink two to three litres of water a day to keep secretions mobile.
- Take nebulisers and inhalers as advised by your therapist - ideally bronchodilators and mucolytics before AD and nebulised antibiotics after.
- Blow your nose.

Technique

Note: You can take one initial breath **all** the way **in** and then **all** the way **out** to locate secretions prior to starting the AD cycle.

- Take a silent breath in through your nose.
- Hold this breath for two to four seconds.
- Use a fast, but not forced, breath out - keeping your mouth and throat open ('O' shaped mouth). Listen for crackles on this breath out.
- Breathe at a 1.5 to two time's normal volume breath, starting where you feel your lungs are empty to move mucus from smaller airways.
- Gradually build up from low to mid to high lung volumes, maintaining the same length breath. Stay at each level for as long as you feel is necessary to move secretions. Move on to a higher volume of breath when the sound changes.
- Breathe at your deepest possible breath volume when the mucus is ready to move.
- Try **not** to cough during the cycle.
- Use one to two controlled huffs and coughs only.



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