



PATIENT INFORMATION

AUTOGENIC DRAINAGE



Autogenic Drainage (AD) means 'self drainage'. It is a technique which can help you clear secretions from your lungs.

How will this technique help my chest condition?

It uses your airflow to move secretions from the smaller airways into the larger central airways to clear them. There are three phases of the breathing exercises:

- A) Unsticking the mucus in the smaller airways by breathing at low lung volumes;
- B) Collecting the mucus from the middle airways by breathing at mid lung volume;
- C) Evacuating the mucus from the central larger airways by breathing at high lung volumes.

What does the technique involve?

Before you start the AD cycle, you must have the correct breathing technique, which is then used at different lung volumes as above

Breathing in (inspiration):

- Slowly breathe in through the nose, keeping the upper airways open
- Use the diaphragm and/or the lower chest if possible
- Hold your breath for 3 seconds to allow air to get into the small airways and behind any sputum

Breathing out (expiration)

- Try to breathe out through your mouth if possible, holding your mouth open in an 'O' shape
- As you breathe out, tighten your abdominal muscles to help push the air out
- The breath out should be quick but not forced. The breath out should sound like a sigh and you should be able to hear the crackles of the sputum
- There should be a constant steady airflow
- You can practice by breathing out as if you are trying to mist or steam up a mirror
- Try not to cough!

Assessment breath

The key to successful AD is being able to find where the secretions are and work at that level.

To assess where your mucus is, take a breath in and then all the way out.

If you hear crackles at the beginning of the breath, then the mucus is in the larger airways and you should start with high lung volume breathing.

If you hear fine crackles towards the end of the breath, then the mucus is in the smaller airways and you should start with low lung volume breathing.

The Autogenic Drainage Cycle

Position

You can do this sitting or lying down on either side.

Relax your shoulders and arms and then slightly extend your neck.

To begin you need to clear the upper airways (nose and throat) by huffing or blowing your nose.

Low lung volume breathing (unsticking) - small airways

- Take a small breath in slowly through your nose, keeping your upper airways open
- Hold your breath for a few seconds
- Breathe out through your mouth. Keep breathing out as far as you can, allow your tummy (abdominal) muscles to tense. This will take you down to low lung volume.
- Now take a partial breath in slowly (resist the urge to take a big breath in)
- Repeat this until you feel the secretions moving up in your airways. (aim for 10 breaths)

Middle lung volume breathing (collecting) - middle/large airways

- Take a normal sized breath in.

Hold your breath for a few seconds then breathe partially out (not all the way out) through your mouth, as before

Keep breathing this way until you can hear/feel the sputum moving (aim for 10 breaths)

High lung volumes (evacuating) - large airways

- Breathe in slowly through your nose as far as you can, keeping your upper airways open
- Hold your breath for a few seconds
- Only breathe part of the way out to keep you at high Lung volume
- Take a big breath in slowly and repeat the breath out.
- Keep breathing this way until you feel/hear the sputum is ready to be cleared

Clearing

- Do 1 or 2 huffs or an effective cough to clear the sputum.
- Try not to cough until the mucus is in the larger airways.

You have now completed one cycle. Use breathing control for one to two minutes. Repeat the cycle until the mucus is cleared.

Breathing Control or relaxed breathing

This is gentle breathing trying to use your lower chest while keeping your shoulders and upper chest relaxed. You should breathe in and out at a comfortable rate and your breathing should sound quiet. Try to breathe in through your nose and out through your nose/mouth. It is very important to take time to do Breathing Control in-between the more active exercises as it allows your airways to relax.

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

- Worcester Royal Hospital 01905 760622
- Alexandra Hospital 01527 512114
- Kidderminster Hospital 01562 513066

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.