



UNIVERSITY HOSPITAL LLANDOUGH

ALL WALES ADULT CYSTIC FIBROSIS CENTRE

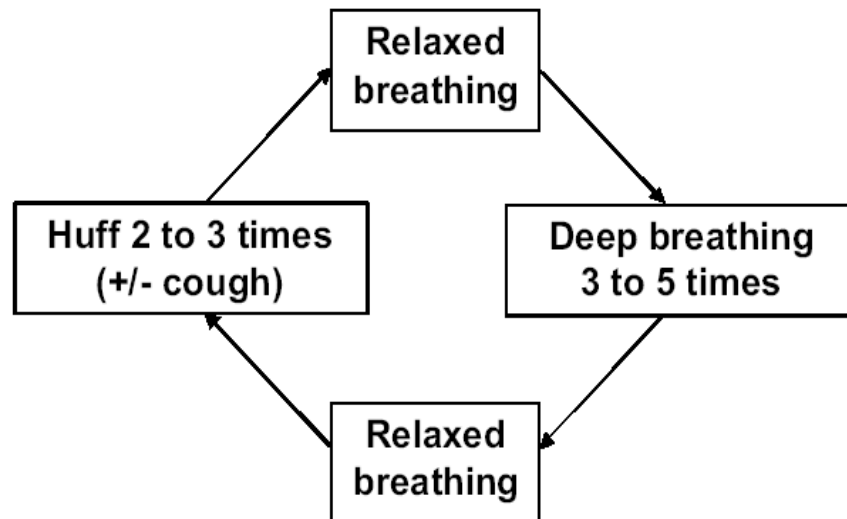
Active Cycle of Breathing Technique

The active cycle of breathing technique (ACBT) is a method of breathing exercises performed in a cycle, used to help loosen and clear secretions from within the lungs.

It consists of three different parts:

1. **Breathing control (BC)**
2. **Thoracic expansion exercises (TEE)**
3. **Forced expiratory technique (FET)**

A typical cycle:



Breathing Control

Gentle relaxed breathing using your lower chest (diaphragm) is used to prevent tiredness and breathlessness.

Your shoulders and arms should be relaxed and breaths should be of a normal size and speed. If you can breathe gently and slowly in through your nose and out through your mouth.

Relaxed breathing is used to decrease airway tightness and improve your breathing rate and pattern. If breathlessness is a problem this period should be concentrated on in preference to the rest of the cycle.

Thoracic Expansion Exercises

Deep breathing exercises used to expand the lungs, thereby getting air behind the sputum to assist in moving it.

Take a slow deep breath in, ideally through the nose, until the lungs feel full; hold the breath, usually for 3 seconds and then breathe out gently through the mouth.

This should be repeated 3-4 times in order to be most effective, or as directed by your physiotherapist.

Forced Expiratory Technique

Also known as the huff.

It helps to get the sputum into the throat in order to be coughed clear.

Take a medium size breath in, then with the mouth kept wide open, huff from the back of the throat like trying to steam up a mirror.

1 or 2 huffs are all that is needed for this part of the cycle. Do not repeat several huffs in a row, always return to breathing control.

The 'huff' should be fast enough to clear secretions but not so forceful that you create a wheeze like sound where your airways shut. If you are unsure speak to your physiotherapist.

When do I stop?

Keep doing the cycle until you have done two cycles without clearing any phlegm OR until you are tired.

How often should I do this?

Instead of coughing alone, use the cycle when you feel you have phlegm to clear.

If you have an infection you will need to do the cycle several times a day to clear the phlegm. ACBT is sometimes used alongside other clearance techniques such as postural drainage or chest percussion.

The ACBT can be used in any position in which you are comfortable. Many people find upright sitting the best, but side lying positions can be more effective at clearing phlegm.

If you require any further information regarding ACBT or any other physiotherapy techniques please do not hesitate to contact us -:

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