Breathing awareness

Sit comfortably in a quiet room, place one hand on your upper chest and the other over the top of the tummy, then breathe normally noting your breathing pattern.

- Experiment with slight alterations in depth and rate of breathing, to distinguish the difference
- Alternate nose and mouth breathing to feel the difference, noting the passage of breath through the nose, mouth, windpipe and into the lungs and then gently back the same way
- Feel the size of the breath
- Check muscle tension throughout the whole body

Low and slow breathing

- Low, gentle controlled breath. Conscious thought about breath in and breath out
- Breathing less means reducing the rate or depth or both. Slow breathing does not mean deep breathing
- Low and slow is the key

Breathing control

Try to relax in reclined sitting with a pillow under your knees or sit well supported.

- Place your hands on the front of your abdomen, just below your lower ribs
- Breathe out gently, at the same time relaxing the upper part of the chest and dropping your shoulders
- Relax and breathe slowly in through your nose and feel your tummy rise, breathe out gently through the nose or mouth feeling your tummy fall

Try repeating these exercises for 10 minutes twice daily and reinforce them through the day. This will make your breathing easier if you have an attack. Try visualising something slow and calming, or listen to calm music. This should help to slow and control the breathing pattern and rate.

Panic attacks

If you are acutely short of breath and finding it difficult controlling your breathing using the techniques described above then the following may help you in the short term:

- Get a paper bag large enough to take a lung full of air (not plastic bag)
- Scrunch the top of the bag, and breathe fully out into it Re-breathe the air in the bag back in and out several times, until you feel better (this will bring the carbon dioxide levels back up)
- Try leaning forward over a table with your elbows on your knees
- Continue with this for a minute, and then take a breath of room air. If the symptoms persist, repeat until settled

This is a short term measure only and should not be relied on, if symptoms persist then you should seek specialist help.

Contact details

THREADS Physiotherapist
01823 344756
Physiotherapy appointments
01823 344965
Hyperventilation
Hyperventilation means moving more air through the chest than the body can deal with.

Most people have experienced acute hyperventilation (“over-breathing”) at some time; caused by stress or over-excitement in form of an acute attack.

Less easy to spot is chronic hyperventilation – a breathing pattern disorder in which over-breathing becomes a habit – usually in response to prolonged stress and tension.

Hyperventilation can produce a number of frightening symptoms, which can be either constant or intermittent, for example:

- Breathlessness
- Inability to take a deep breath
- Anxiety, feeling of panic, impending disaster, detachment
- A rapid or irregular heart beat
- Chest pain or tightness
- Dizziness, faintness, light headedness
- Headaches, visual disturbances
- Tingles, “pins and needles” in hands and feet
- Cramps, shakes, sweats and twitches
- Weakness, exhaustion, lack of concentration and memory, insomnia or nightmares

Patients with hyperventilation do not over breathe on purpose – rather they are often unaware of how they are breathing. Because the symptoms are so severe and physical, patients often don’t believe the doctor is taking them seriously if “hyperventilation” is proposed as a cause.

Why does hyperventilation cause all these symptoms?
We breathe to obtain oxygen for our bodies; however, the second important reason is to breathe away carbon dioxide, which is a waste gas. If we breathe more than we need to, too much carbon dioxide is lost. This causes changes in our body’s chemistry, which cause the symptom of hyperventilation.

Why do some people hyperventilate?
Over breathing is a normal reaction to stress or strain; it only becomes abnormal when stresses and strains reach levels that lead to chronic hyperventilation and outbreaks of symptoms.
These stresses and strains may have been triggered from:
- Organic causes – asthma, pain, pneumonia, chronic chest or heart disease
- Physiological causes
- Psychological and social causes – fear, anxiety, depression, perfectionist personality, bereavement etc
- Drugs – nicotine, caffeine, amphetamines

These original causes can be managed but sometimes the respiratory centre of the brain becomes “reset” and over breathing becomes habitual. Often people chronically hyperventilate without realising it.

How do we diagnose and treat hyperventilation?
- The diagnosis is established by taking a full medical history and of course excluding other illness or disease as a cause of symptoms. Sometimes your symptoms can be reproduced by taking several deep breaths.
- It is then important to understand and explain the nature of the problem and provide reassurance that there is not some awful other cause.

You should then be referred to a specialist respiratory physiotherapist who will base treatment on:
- Education regarding chronic hyperventilation syndrome
- Relearning your breathing pattern and rate by gaining a conscious control of rate, volume and regularity of breathing
- Restoring normal breathing pattern and movement
- Reducing anxiety and achieving relaxation
- Restoring usual activity levels
- Learning to relax the upper chest and shoulders

Normal breathing
Most people breathe using the diaphragm (the muscle under the lungs) as the main muscle for breathing. The only active part of respiration is breathing in. The relaxation of the inspiratory muscles and elasticity of the airways achieve breathing out. There should be little movement of the upper chest.
The normal rate of breathing is 12-14 breaths per minute at rest.

Hyperventilation
People who over breathe tend to overuse the upper chest, hardly managing any movement of the diaphragm. The rate of breathing varies and can be upwards from 16 breaths per minute; this may rise significantly during an attack or exertion.
The pattern / rhythm of breathing is often erratic and irregular deep breaths, sighs and yawns are common.
Breathing out can be forced and noisy.