Outpatient Physiotherapy

Patient Information

Breathing exercises in the treatment of hyperventilation

Document history

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Hyperventilation means over-breathing or breathing in excess of your needs. It is a perfectly normal reaction to stress, where there is a natural increase in the rate and depth of breathing. If allowed to continue it can become a habit.

Continuous over-breathing causes a lowering of the carbon dioxide level in the blood stream and because the blood circulates all round the body, it can cause many different symptoms. The most common ones are:

- shortness of breath
- tingling in the hands and feet
- muscle tremors and cramps
- headaches
- dizziness and feelings of unreality
- general tension
- excessive exhaustion and fatigue
- indigestion

Treatment aims to correct your breathing pattern and help you relax.

**Normal breathing pattern**

Is gentle, silent diaphragmatic (tummy) breathing, with very little upper chest movement. The rate should be about 10 to 12 average sized breaths a minute, at rest.

**Hyperventilation**

Is erratic sometimes noisy breathing, mainly with the upper chest. The rate of breathing is fast, often more than 15 breaths a minute and the depth of each breath varies, sometimes giving deep sighs.
Contrast
Tighten up a group of muscles as hard as possible, then relax them completely and feel the difference between tension and relaxation.

For tense shoulder and neck muscles pull your shoulders down towards the floor and release them gently a few times. Try tightening and relaxing each muscle group in turn, starting at your feet and working up to your neck and face.

General relaxation
Loosen tight clothing then lie or sit comfortably so that you are fully supported. Close your eyes and without moving, try to concentrate on each muscle group in turn. Let it relax as much as possible, starting at your feet and working up to your head and face. Spend two minutes thinking of your breathing and letting your whole body relax a little more with each breath out. Repeat the sequence two or three times more, so that the session lasts 15 to 20 minutes. When you move, get up slowly and try to keep this relaxed calm feeling going for as long as possible.

Visual relaxation
With your eyes closed, try to visualise a scene such as a beach or garden where you can feel comfortable, warm and relaxed. Concentrate on letting your muscles let go and keep your breathing slow and gentle. A relaxation CD can be useful.

Practice
Concentrate on your breathing regularly throughout the day and correct it if necessary. Formally relax for 20 minutes at least twice a day. Beware of stressful situations, even excitement, which may upset your breathing pattern. Try to slow down in everything you do and take life at an easier pace, so that you allow yourself time to breathe and relax. It takes several weeks, even months, to break the bad breathing habits of many years,
do not expect quick results from these exercises. Be patient, practice often and the end result can be very rewarding.

**Breathing exercises**

Become aware of your breathing by placing one hand on your upper chest and one on your tummy. Let your upper chest relax down, and with the next breath allow your tummy to swell forwards as you breathe in, and fall back gently as you breathe out. Try to get a steady rhythm going, taking the same depth of breath each time. Next, try to slow your breathing rate down by putting in a short pause after you have breathed out and before you breathe in again.

At first you may feel you are not getting enough air in but with regular practice this slower rate will soon feel comfortable. Try breathing in for a count of three and out for a count of four.

Breathing is something you do all the time so check that you have it right in all positions whether lying, sitting or standing.

On exercise there will be a natural increase in your breathing rate, but check afterwards to make sure that you go back to the slow steady rhythm.

Try to talk slowly, do not say too much with one breath and pause to take a gentle breath in from your tummy, before carrying on.

**Relaxation**

We all have a certain amount of tension in our bodies, but beware of unnecessary tension and stress, and learn to control it. Try the following techniques:

**Relaxed breathing**

1. Relax your upper chest and shoulders.
2. Breathe in, keeping your shoulders relaxed.
3. Let the breath gently out. Breathing out requires no effort.
4. Breathe at a comfortable pace.
   - Repeat three or four times.

**Books**

*Hyperventilation Syndrome* by Dinah Bradley, Celestial Arts. *Books on Relaxation* by Jane Madders, Laura Mitchell and Dr Claire Weekes can be obtained from the library, or try: [http://www.relaxationforliving.co.uk/](http://www.relaxationforliving.co.uk/) or other online sites.

**Further advice**

Please be aware that this handout is to be used as a guide. If you find these exercises painful please seek advice from your physiotherapist or GP.

**Contacts**

Please contact our reception on 01223 216633 to leave a message for your physiotherapist, or to enquire about appointments.

*This information has been compiled by the Physiotherapy team at Addenbrooke’s Hospital. You may receive this information during an appointment with a physiotherapist, from your GP or via our website at [http://www.cuh.org.uk/outpatient-physiotherapy](http://www.cuh.org.uk/outpatient-physiotherapy)*