



Aspiration during special procedures

Information for patients and relatives from Therapies

You have been given this leaflet, as you have aspirated during your radiological procedure. This leaflet explains how you may feel once you return home, and what to do if you have any concerns.

What is aspiration?

Aspiration is when food, drink, or other materials (such as saliva or barium used during your barium swallow) enter your airways or lungs by accident.

What happens if I aspirate during my procedure?

Your radiographer will be able to see if you have aspirated during your procedure. If you have, your procedure will be stopped immediately. The radiographer will then explain what has happened. You will be asked to remain in the department for at least 10 to 15 minutes, to check if you become unwell or not.

- **It is unlikely that you will become unwell after you aspirate.** If you do, the radiographer will ask a doctor to review you. This doctor may ask for a respiratory physiotherapist to assess you before you leave hospital.
- If after 15 minutes you are **showing no signs of ill health**, you will be able to leave the hospital.

Who is at risk of aspirating?

People who already have swallowing difficulties are more at risk of aspirating, but this can happen to any patient.

What is aspiration pneumonia?

If you have been told that you aspirated during your procedure and you do start to feel unwell either in the hospital or at home, you may have developed a condition called aspiration pneumonia.

Pneumonia is a general term describing an infection in the lungs caused by bacteria, viruses, and fungi. The infection causes inflammation in the air sacs in your lungs, which fill with fluid or pus, making it difficult to

breathe.

Aspiration pneumonia is a type of pneumonia that is caused by bacteria entering the lungs and causing a severe infection. These bacteria usually enter the lungs when we accidentally breathe in food, fluid, or saliva.

If you develop aspiration pneumonia, it is very unlikely that you will develop any long-term problems with your lungs, breathing, or swallowing.

What signs should I look out for?

If you develop aspiration pneumonia, most patients will show symptoms before they leave hospital. However, if you develop any of the following symptoms at home, please contact your GP or call 111 for advice. Explain that you have aspirated during a hospital procedure and it may be linked with this.

- Coughing with or without yellow or green secretions (phlegm / mucus)
- Fever with or without chills
- Difficulty breathing
- Chest pain or discomfort
- Fatigue (extreme tiredness) and malaise (generally feeling unwell)
- Loss of appetite.

If you develop any of the following, more severe symptoms, please call 999 immediately.

- Fast breathing
- Confusion
- Low blood pressure
- Fast heartbeat or palpitations
- Coughing blood
- Nausea (feeling sick) and vomiting.

If you feel unwell after your procedure whilst still in hospital, you should tell your healthcare professional.

Why have I been given breathing exercises?

If you are diagnosed with aspiration pneumonia, you may develop secretions which are difficult to clear. If this happens, you may be advised by the physiotherapist to perform the following breathing exercises. These can help clear the secretions.

The Active Cycle of Breathing Technique (ACBT)

- ACBT is a simple pattern of breathing which can be used to help clear secretions and improve your breathing.

- There is no limit to how many times per day these exercises can be done.
- ACBT is a combination of several breathing exercises. The exercises can be used inter-changeably, depending on what feels most helpful for you.
- Continue with this cycle of exercises until you feel your lungs are clear, and you can cough normally.
- These exercises should not hurt. If they do, please stop and contact your GP.

1. Breathing control

- This is normal gentle breathing using the lower chest. It helps to relax the airways between the deep breathing and the huffing.
- Breathe in and out at your own rate. Put one hand on your upper chest and the other on your belly just above your waist. As you breathe in, you should be able to feel the hand on your belly moving out. The hand on your chest should not move. You should be able to feel the hand on your belly moving in as you exhale (breathe out).
- Breathe in through your nose and out through your mouth if possible. If this is difficult, just using your mouth is fine.

2. Deep breathing

- This exercise helps expand your lung tissue and move your secretions.
- Take three to four slow deep breaths in through your nose, if you are able. Relax and sigh the air out through your mouth.
- To make the technique more effective, you may wish to:
 - a) keep your shoulders relaxed
 - b) hold each breath for up to three seconds
 - c) sniff air in through your nose quickly at the end of the deep breath in (inspiration)
 - d) combine the above techniques.

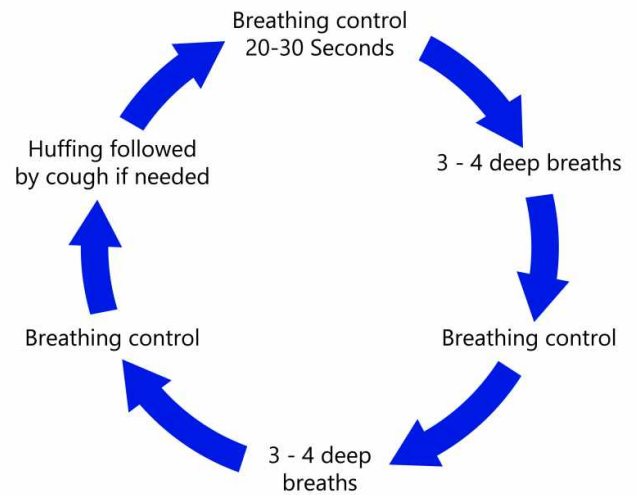
3. Huffing

- This exercise helps to move secretions along your airways, to a point where you can cough them up.
- To huff, blow air out quickly through an open mouth, like steaming up a mirror. Use your stomach muscles to help. Try not to do this technique too hard, as it can cause wheezing.
- When using this technique you may feel the sputum rattling on your chest, this means it is moving.
 - a) **Small-long huff** helps to move sputum that may be lower down in your lungs. Take a small to moderate breath in, then huff until your lungs feel empty.

b) **Big-short huff** helps to move sputum higher up in your airways. Only do this when the sputum feels ready to be cleared. Take a big breath in, then huff quickly. This should clear the sputum into your mouth without the need to cough.

4. Coughing

- Following huffing, a small cough should now be able to clear your secretions.
- Do not cough unless secretions are ready to be cleared.
- Continue the cycle until your lungs feel clear, but for no longer than 20 minutes.
- If you cannot clear your secretions the first time, return to the start of the cycle and begin again.
- If you cough during the cycle, return to the start.



The Active Cycle of Breathing Technique (ACBT)

What if I have any questions or concerns?

If you have any questions or concerns about your condition, please contact your GP.

This leaflet has been produced with and for patients.

If you would like this information in **another language, audio, Braille, Easy Read, or large print** please ask a member of staff. You can ask someone to contact us on your behalf.

Any complaints, comments, concerns, or compliments please speak to your doctor or nurse, or contact the Patient Advice and Liaison Service (PALS) on 01227 783145 (tel://+441227783145), or email ekh-tr.pals@nhs.net (ekh-tr.pals@nhs.net)

Patients should not bring large sums of money or valuables into hospital. Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property has been handed into Trust staff for safe-keeping.

Further patient leaflets are available via the East Kent Hospitals website (<https://www.ekhuft.nhs.uk/information-for-patients/patient-information/>).

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