

## Radiology\ Fluoroscopy

### Active Cycle of Breathing Technique (background information – aspirated barium)

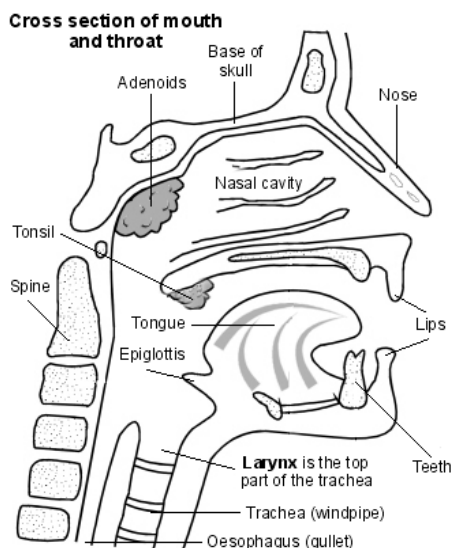
**For patients who have aspirated barium into the lungs during a barium swallow or meal**

- A barium swallow is performed to examine the oesophagus (food pipe)
- A barium meal is performed to examine the stomach (upper digestive tract) and duodenum (first part of the small intestine)

#### What does aspirated mean?

Aspiration is when something you swallow goes down the wrong way and enters your airway or lungs. Occasionally during the procedure a patient will cough or have difficulty swallowing the barium; as the oesophagus (gullet) is in close proximity to the trachea (windpipe) the barium liquid may be inhaled, via the trachea, into the lungs.

Below is a diagram of your anatomy to help you understand.



### **How will I know if I have aspirated any barium contrast?**

The radiologist or specialist radiographer will know if you have aspirated the barium liquid whilst the investigation is being carried out. They will be able to see this happen on the special X-ray equipment during the procedure. You may also find that you want to cough naturally as the barium liquid will irritate the lungs.

### **What are the risks of aspirated barium?**

Aspiration of barium sulphate is not expected to cause severe lung injury due to its relatively non-irritant nature; however, complications that do arise depend upon:

- the density and quantity of the aspirated solution,
- how far it has progressed into the lung,
- the general physical condition of the patient.

Rarely cases may result in inflammatory changes, pneumonia or fibrosis of the lung tissue without early treatment and follow-up.

### **What is the treatment for aspirated barium?**

If you have aspirated some of the barium liquid into the lungs it is necessary to clear your chest as soon as possible to prevent a chest infection developing. In order to do this we use some special breathing techniques and positioning called postural drainage.

These exercises will be performed in the Radiology Department before you go home.

Your specialist radiographer will tell you if you need to do the exercises when you get home and the frequency.

### **What is active cycle of breathing technique?**

Active cycle of breathing technique (ACBT) is a simple pattern of breathing that helps to:

- loosen and clear mucus from the lungs
- improve the efficiency of your cough
- improve ventilation in your lungs.

## Patient Information

The radiologist or specialist radiographer will discuss the technique with you ensuring that you understand how it works and how to do it. You will be given an active cycle of breathing technique instructional leaflet to take home with you.

### **What do I need to do following discharge from the hospital?**

The radiologist, radiology nurse or specialist radiographer will observe you before going home.

- You will be given clear instructions on breathing exercises to be continued at home.
- Please be careful when you first start to mobilise – ensure you are steady on your feet.
- It may be necessary for you to have someone to take you home.
- Take your regular medication as normal.
- A letter will be sent to your GP telling them about the procedure.
- **If you have any breathing difficulties or develop a cough please seek medical advice.**

### **Further Information**

If you have any other questions or require further information, please contact the Radiology Department on 024 7696 7115 in hours (9am -5pm).

Outside of these hours, (after 5pm) please contact the emergency services on 111 or seek medical advice from your GP.

The Trust has access to interpreting and translation services. If you need this information in another language or format please contact the telephone number on your appointment letter and we will do our best to meet your needs.

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#### **Document History**

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