The ROYAL MARSDEN

NHS Foundation Trust

Patient information

Using an Active Breathing Coordinator (ABC) device

During your radiotherapy planning and treatment, we will ask you to try using a system called an Active Breathing Coordinator (ABC). We have assessed this device and found it can be used to keep your lungs still during radiotherapy.



What is the Active Breathing Coordinator system?

This is a breathing system designed to help you hold your breath for a short period of time. It involves placing a plastic tube in your mouth and breathing through it, rather like a snorkel and a clip on your nose (see picture). The tube is connected to a computer which allows us to see your breathing pattern. The ABC device will be used at radiotherapy CT scanning and during your radiotherapy.

What happens during the CT planning scan?

We will show you the device and ask you to try using it to hold your breath for 5, 10, 15 and 20 seconds. If you find it comfortable and are able to hold your breath for 20 seconds or more, then we will carry out a CT scan with you using the device with your breath held. You will then have the radiotherapy treatment using the device. It may help to practise holding your breath for 20 seconds at home.

What happens if I am unable to use the device during the CT planning scan?

If you are unable to hold your breath for at least 20 seconds, we will carry out a CT scan with you breathing normally. A band will be placed around your waist to help see your breathing pattern. We can still plan your treatment accurately this way. You will then have your treatment whilst breathing normally.

What happens during radiotherapy treatment?

If you are able to hold your breath for 20 seconds then we will ask you to have your treatment using the device. You will be asked to hold your breath seven or eight times during the radiotherapy treatment. Some of these breath holds may be shorter than 20 seconds.

> Radiotherapy Department Page 1 of 2 Revised: February 2022 Planned review: February 2025 © The Royal Marsden NHS Foundation Trust RT-1243-05











What are the possible side effects?

The breathing system may feel a little uncomfortable in your mouth at first and it may take some practice to breathe with it; the radiographers in the CT scanner will help you with this. If at any time you wish to breathe normally, you can easily stop the system.

Contact details

If you have any questions about this information, please contact:

Pre-treatment radiographers, **Sutton**

0208 661 3262

