

Deep Inspiration Breath Hold Technique for Radiotherapy

Radiotherapy Department



Patient information leaflet

Who is this leaflet for?

This leaflet is for patients having radiotherapy to the breast or chest wall involving the Deep Inspiration Breath Hold technique (DIBH). This leaflet is designed to be read alongside the Radiotherapy to the breast/ chest wall booklet. The aim of this leaflet is to provide you with further information about radiotherapy to the breast or chest wall using the Deep Inspiration Breath Hold technique.

Introduction

Your clinical oncologist has decided that radiotherapy to your breast or chest wall would be most effective using the Deep Inspiration Breath Hold technique. This treatment technique requires you to hold your breath during your CT scan and during your radiotherapy. When recommending this method of treatment the oncologist takes into account your ability to hold your breath as well as whether this technique will provide an advantage over other techniques. You may decide that you do not wish to have to hold your breath during your treatment. This is an option you can choose and you will be able to discuss this with your clinical oncologist.

What is the Deep Inspiration Breath Hold technique?

The Deep Inspiration Breath Hold technique is a method of radiotherapy that requires you to hold your breath during your CT scan and treatment. A special camera and equipment monitors your breathing with the help of a small plastic box taped to your chest. The equipment will only allow the treatment machine to deliver radiation whilst you are holding your breath.

Why use the Deep Inspiration Breath Hold technique?

Holding your breath stops your chest moving and helps to keep you still, this helps to focus the treatment. Your breast and chest wall are also very close to your lungs and heart. This makes it difficult in some patients to treat the breast and chest wall without their lungs or heart receiving a small amount of the dose. By holding your breath your chest is expanded, pushing your breast and chest away from your heart and expanding your lungs. This will help minimise the dose to your lungs and heart.

What will you need to do?

You will need to be able to take a deep breath in and hold it for at least 15 seconds to be able to undergo this technique. During the CT scan and the treatment you will need to hold your breath for 15 seconds on successive occasions. It is important to take as big a breath as you can manage when asked to hold your breath by the radiographers. This will expand your lungs and chest as much as possible and help with your treatment. The radiographers will practice this with you at the CT scan to make sure you are comfortable before going ahead with the scan.

It is a good idea to practice holding your breath a few times a day at home for several days before coming to your CT scan and treatment appointments. This will help you to be confident in holding your breath. Practicing will also help improve the ability of your lungs to take in bigger breaths.

CT Scan

To help you to see how much of a breath you need to hold, the radiographers will ask you to practise breathing in and holding your breath. The radiographers will take some measurements while you are breathing normally and when you are holding your breath. It is important that you take in a big breath to expand your lungs as much as possible but also that you can easily reproduce this breath. If you are finding it difficult at the CT scanner to take in enough breath please inform the CT radiographers.

Treatment

To position you for your treatment the radiographers will ask you to hold your breath several times as they get you in position. It is important to still take as big a breath as you can to replicate what you achieved at the CT scan appointment. When the radiographers are happy you are in the correct position and have finished their checks they will inform you when they are ready to leave the room. The radiographers will let you know when they are ready to begin the treatment via an intercom system, and will ask you to hold your breath.

Once you have taken a big enough breath the treatment machine will turn on and deliver the treatment. As soon as you exhale the machine will turn off again. You will need to hold your breath a few times to complete each field of the treatment but the treatment will only start when you are ready and are holding your breath. Please remember that you cannot make the machine treat you incorrectly. If the breath you take is not big enough the treatment machine will not turn on. The radiographers will also be monitoring you the whole time and will help guide you through the treatment.

If you would like more detailed information on radiotherapy to the breast or chest wall or the side effects from the treatment please refer back to the Radiotherapy to the Breast /Chest wall booklet.

Where can I get further support?

Further support can be given by the various Support Centres at locations in Guildford, Redhill, Crawley and Purley. These centres provide information, complementary therapies, support groups and one to one support.

To find out more contact the individual centres or ask radiotherapy department staff for a leaflet.

The Fountain Centre is located in St Luke's Cancer Centre at Guildford.

- Telephone: 01483 406618
- Website: www.fountaincancersupport.com

The Olive Tree is located in Crawley Hospital, Crawley.

- Telephone: 01293 534466
- Website: www.olivetrecancersupport.org.uk

The East Surrey Macmillan Cancer Support Centre is located at East Surrey Hospital.

- Telephone: 01737 304176
- Email: informationcentre.sash@nhs.net

South East Cancer Help Centre is located in Purley, Surrey.

- Telephone: 020 8668 0974
- Website: www.sechc.org.uk

Please also see the department's website for additional information at

- www.royalsurrey.nhs.uk/st-lukes-centre

Other support websites and groups

Cancer Research UK

- Website: www.cancerresearchuk.org
- Telephone: 0808 800 4040

Macmillan Cancer Support

- Website: www.macmillan.org.uk
- Telephone: 0808 808 0000

Breast Cancer Care

- Website: www.breastcancercare.org.uk
- Telephone: 0808 800 6000

Quit 51

- Website: www.quit51.co.uk
- Telephone: 0800 622 6968

Useful telephone numbers

Telephone numbers across both sites (Guildford/Redhill)

- Treatment Appointments 01483 571122 ext 6632
- Onslow Ward (out-of-hours) 01483 571122 ext 6858
- For urgent enquiries (out-of-hours) call hospital switchboard on **01483 571122** and ask operator to bleep on-call oncology SHO.

Guildford numbers

- Radiotherapy Reception 01483 406600
- Patient Support Office 01483 571122 ext 2066
- Oncology CT Scanner 01483 406630
- Clinical Nurse Specialist 01483 571122 ext 6908

Redhill numbers

- Radiotherapy Reception 01737 277311
- Oncology CT Scanner 01737 768511 ext 1202
- Patient Support Office 01737 277315
- Clinical Nurse Specialist 01737 768511 ext 6688

Additional information

- In order to improve treatments and services, audits are regularly carried out in the department. This can involve using patient notes. The notes will have all identifiable details removed to ensure patient confidentiality. However, if this is unacceptable to you please let your consultant know so your wishes can be respected.
- Clinical trials are undertaken within the department. If appropriate your doctor will discuss this with you.
- If you require this information in a different format or language please let a member of staff know as soon as possible.

Staff at St Luke's Cancer Centre cannot take responsibility for patient belongings brought into the hospital. Please keep all your personal belongings with you at all times. Please leave valuables at home.

Reference sources

- Radiotherapy Clinical Protocol – Breast – Royal Surrey County Hospital NHS Foundation Trust 2015
- Treating Breast Cancer – Cancer research UK 2014
- National Institute for Clinical Excellence (NICE) Guidelines 2017

If you wish to make a comment or complaint about any aspect of the treatment or services provided by St. Luke's Cancer Centre and its staff please speak to a member of St. Luke's. Alternatively you can visit, email, phone or write to the **Patient Advice and Liaison Service (PALS)**. Their contact details are:

PALS office in the main hospital reception area, telephone **01483 402757** or write to:

PALS Manager
Royal Surrey County Hospital NHS Trust
Egerton Road
Guildford
GU2 7XX

- Email: rsc-tr.pals@nhs.uk
- www.royalsurrey.nhs.uk

You may also write to the Chief Executive of the Trust at:

Royal Surrey County Hospital NHS Trust
Egerton Road
Guildford
GU2 7XX

Radiotherapy contact details

Radiotherapy reception

Telephone: 01483 406 600

PALS and Advocacy contact details

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

Telephone: 01483 402757

Email: rsc-tr.pals@nhs.net

Opening hours: 9.00am–3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

Past review date: November 2018

Future review date: November 2021

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PIN181127–1594

