

# Deep inspiration breath hold (DIBH) for radiotherapy to the central chest for lymphoma

This leaflet explains more about using the deep inspiration breath hold technique when having radiotherapy to the central chest for lymphoma. It includes the benefits, risks and any alternatives, as well as what you can expect when you come to hospital.

If you have any further questions, please speak to a doctor or radiographer caring for you.

## What is deep inspiration breath hold (DIBH)?

Deep inspiration breath hold (DIBH) is a technique whereby you hold your breath during your planning CT scan and for up to 30 seconds at a time during your radiotherapy treatment.

## Why should I have DIBH?

The action of holding your breath inflates your lungs and pushes your heart downwards within the chest. This is important as it may move your heart away from the area that we want to treat with radiotherapy. It may also mean that your lungs receive less radiation during treatment.

As everyone is different due to their size, shape and internal anatomy, we won't know if we need to use DIBH until you have had your planning CT scans. For example in some people, even when breathing normally, their heart will not be in the radiation field, so for them DIBH may not be required.

## What are the risks?

There are no risks associated with DIBH.

## Are there any alternatives?

The alternative to DIBH is to have radiotherapy whilst breathing normally. We would still aim to spare as much of your heart and lungs from the radiation beams as possible.

## How can I prepare for DIBH?

You do not need to do any specific preparation but you might like to practise holding your breath for 20 to 30 seconds at a time to get used to the sensation.

## Giving my consent (permission)

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

## What happens during my CT scan with DIBH?

The procedure for having a planning CT scan is explained in the leaflet **Radiotherapy CT planning scan**. At your planning appointment you will have an initial CT scan without holding your breath.

You will then be asked to hold your breath three to four times and the radiographers will draw some pen marks on your skin and take some measurements. Once you are happy with the process you will have another CT scan whilst holding your breath. The radiographers will speak to you through an intercom and tell you when to hold your breath and when to release it. You will be holding your breath for approximately 20 to 30 seconds at a time. If you are not able to hold your breath then DIBH is not for you and we will give you your radiotherapy whilst breathing normally.

## What happens during my radiotherapy treatment with DIBH?

Each time you have your radiotherapy treatment you will lie down on the treatment couch in the same position as you were for your CT scan.

The radiographers will move you into the correct position and will ask you to hold your breath and then release it several times until they are happy with your position. The radiographers will then leave the treatment room and will speak to you through an intercom. When the radiographers are ready to switch the radiation on they will ask you to hold your breath. You will hear the treatment machine switch on. When the radiation beam is finished they will tell you to release your breath. This will happen several times until the treatment is finished. The number of times that you need to hold your breath depends on how long you are able to hold it for.

A computer monitors your breathing and position, so if you release your breath without being told to, it will alert the radiographers and they will switch the radiation off. The radiographers are watching you all the time, so if you are not happy, you can let them know by raising your hand.

## Will I feel any pain?

You will not feel any pain with this technique

## Useful sources of information

Please refer to the leaflet **General information about radiotherapy** for further information. If you have not been given a copy, and would like one, please ask us.

## Contact us

If you have any questions or concerns about deep inspiration breath hold (DIBH), please contact the pre-treatment team on **020 7188 3160** (Monday to Friday, 9am to 5pm).

Guy's and St Thomas' hospitals offer a range of cancer-related information leaflets for patients and carers, available at [www.guysandstthomas.nhs.uk/cancer-leaflets](http://www.guysandstthomas.nhs.uk/cancer-leaflets). For information leaflets on other conditions, procedures, treatments and services offered at our hospitals, please visit [www.guysandstthomas.nhs.uk/leaflets](http://www.guysandstthomas.nhs.uk/leaflets)



**Dimbleby Cancer Care** provides cancer support services for Guy's and St Thomas'. We have a drop-in information area staffed by specialist nurses and offer complementary therapies, psychological support and benefits advice for patients and carers.

Dimbleby Cancer Care is located in the Welcome Village of the Cancer Centre at Guy's. **t:** 020 7188 5918 **e:** [DimblebyCancerCare@gstt.nhs.uk](mailto:DimblebyCancerCare@gstt.nhs.uk)

## Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the clinical nurse specialist or other member of staff caring for you or call our helpline.

**t:** 020 7188 8748 9am to 5pm, Monday to Friday

## Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

**t:** 020 7188 8801 (PALS) **e:** [pals@gstt.nhs.uk](mailto:pals@gstt.nhs.uk)

**t:** 020 7188 3514 (complaints) **e:** [complaints2@gstt.nhs.uk](mailto:complaints2@gstt.nhs.uk)

## Language and Accessible Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch:

**t:** 020 7188 8815 **e:** [languagesupport@gstt.nhs.uk](mailto:languagesupport@gstt.nhs.uk)

## NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

**t:** 111

## NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

**w:** [www.nhs.uk](http://www.nhs.uk)

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