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The Radiotherapy Department

## High dose rate (HDR) bronchial brachytherapy: a guide for patients

Patient Information Series No. 26



Information and advice for patients,  
relatives and carers

This booklet has been written for patients who have been referred for High Dose Rate (HDR) brachytherapy to the bronchus. The booklet describes:

- What HDR brachytherapy is.
- Your preparation for treatment.
- How your treatment is planned and delivered.
- The side effects you may experience during and after treatment, and how best to cope with them.

If you have any further questions or concerns, please speak to a member of your medical team. Please be aware that other radiotherapy centres may have different techniques.

We understand that this is a daunting time for patients. You may feel that you have been given lots of information about what needs to be done in a short period of time. We hope this booklet answers some of your questions. If you still have any questions or concerns, please let your doctor, nurse or radiographer know. We are here for you.

## **What is HDR brachytherapy?**

HDR bronchial brachytherapy is a form of radiotherapy given by directly introducing a radiation source into the part of your body your doctor (Clinical Oncologist) wishes to treat. Like external radiotherapy it uses high energy x-rays to kill cancer cells. The machine that is used to deliver the treatment is called a Microselectron unit.

## **What is endobronchial HDR brachytherapy?**

Endobronchial means 'inside the lung'. The radiation is therefore delivered directly inside your lung to kill the cancer cells.

The doctor will pass a very fine tube called a catheter into the area of the body to be treated. The catheter is then connected to the Microselectron unit. The unit houses a small radioactive pellet which is then programmed to travel down the catheter. When the required amount of radiation treatment has been delivered the pellet is automatically returned to the unit. In this way the cancer receives the treatment without affecting other parts of your body.

This treatment should relieve some of the distressing symptoms that you may have been experiencing, such as breathlessness, coughing or bleeding.

## **Preparation for treatment**

The hospital will ring about your appointment. You must be nil by mouth (nothing to eat or drink) for 6 hours prior to treatment. If you are taking any anti coagulant medication (e.g. Warfarin) please make sure you inform our doctors as this may need to be stopped before the treatment.

Make sure you have a responsible adult to escort you home, and to stay with you overnight. If you are being treated as an out patient you may be a little drowsy after the treatment, due to the medication you will be given.

## **Any further questions?**

If you have any further questions or concerns about your treatment, please contact:

### **Brachytherapy Radiographer:**

#### **Eleanor Gill**

Direct: 020 3447 3782

Main switchboard: 0845 155 5000 ext 73782 / bleep 1128

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### **Macmillan Information and Support Radiographer:**

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## Appointment details:

**Date and time of brachytherapy appointment:**

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**To be nil by mouth from:**

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## What happens during treatment?

The whole procedure will take about two hours. If you have had a bronchoscopy before, you will know what to expect for the first part of the treatment.

You will be given sedation or sometimes a general anaesthetic. You will feel very sleepy throughout the rest of your treatment. A local anaesthetic spray is used to numb the back of your nose and throat. A bronchoscope is then passed down your nose. A fine tube (catheter) is then passed through the bronchoscope and into your lung so that it is positioned by the cancer.

The radiographers will then take X-ray pictures to ensure that the catheter is in the correct position of the area to be treated. The bronchoscope is then taken out, leaving the catheter in place. This is taped to your nose to prevent it moving. You should not experience any discomfort or be aware of the catheter.

The catheter is then connected to the microselectron unit. You will be left alone in the room while the radiation treatment is being delivered. The treatment itself will only take about 10 minutes or so.

A nurse and radiographer will be with you at all times except when the treatment is on. However, there are television monitors so that the doctors and nurses can observe you very closely from outside the room during this time.

The radiation is painless and you will not feel anything unusual or different while the treatment is being delivered. Once the treatment is finished the doctor, radiographers and nurse will re-enter the room to remove the catheter.

## What happens after treatment?

- You may find that you are still sleepy after the treatment.
- You must not eat or drink for at least one and a half hours after treatment, as your throat will still be numb.
- You should avoid alcohol, driving, operating machinery and signing legal documents for twenty four hours after treatment.
- You may feel breathless, have an increased cough for a few days after the treatment, and your throat may be slightly sore. After a few days this should settle down and you should benefit from the treatment within two to three weeks.
- If you have any questions about this information, or are worried about anything involved in this treatment please do not hesitate to ask your doctor or the radiographers.