



## Radiotherapy with carbogen and nicotinamide

Your cancer in the bladder requires a course of radiotherapy.

This information is for patients with bladder cancer who have been prescribed carbogen and nicotinamide alongside their radiotherapy.

### **If you take medication for your blood pressure, eg Ramipril, please let your oncologist or radiographer know before you start taking the nicotinamide.**

We know that cancer cells which have low levels of oxygen are less sensitive to radiation treatment than those with normal or high levels of oxygen. Therefore your radiotherapy will also involve giving you something to breathe and a tablet to take which will help to increase the levels of oxygen in the cancer cells. This will help the radiotherapy to work better.

- 1. Carbogen** is a gas made up of 98% oxygen and 2% carbon dioxide which is given through a breathing mask (or a mouthpiece) while you are lying on the radiotherapy couch having your treatment. Most patients cope well with breathing carbogen and do not experience any side effects; however should you experience any problems please inform the radiographers treating you.
- 2. Nicotinamide** is a modified vitamin which helps to increase blood flow in the tumours. It is taken as a tablet one and a half to two hours before the radiotherapy.

Nicotinamide has a few possible side effects which you may experience. These include nausea, headaches and flushing. If you suffer from any of these please let us know straight away as the dosage may be reduced or we may advise you to stop taking the tablet. If you do not have any problems you will be asked to take the tablet one and a half to two hours before each treatment for the whole course of your radiotherapy.

Both carbogen and nicotinamide have been widely used by many patients in developing this treatment.

Some side effects of the radiotherapy to the bladder include the need to urinate more often, blood in your urine, a burning sensation on urinating and an increase in the number of times that you open your bowels each day. You will be asked to empty your bladder before treatment as this helps limit the side effects.

For information on side effects please see our patient information leaflet PI12: Radiotherapy to the abdomen and/or pelvis at Mount Vernon Cancer Centre.

If you have any further questions or concerns please ask your oncologist or treatment radiographer.

### **Consent**

It is a legal requirement to have a signed Consent Form from you before the start of your treatment.

If you have already been given one of these forms, please bring the completed form with you when you come for your first appointment.

If you have not been given a form, this will be discussed with you at your first appointment.

### **Identification**

Please note that it is a legal requirement for the staff to check your name and details against your treatment sheet and your hospital name band each time you attend. You must wear your name band at all times whilst in hospital.

### **If you normally pay for NHS prescriptions**

People undergoing treatment for cancer do not have to pay NHS prescription charges if they have a valid medical exemption certificate.

To get an exemption certificate, ask your GP for an application form.

### **Pregnancy/fathering a child**

Female patients must not be pregnant or become pregnant and male patients must not father a child during a course of radiotherapy or for some months afterwards. **Please discuss this with your cancer specialist.**

If you think there is a chance, however small, of you or your partner being pregnant during treatment, it is extremely important that you discuss this with your oncologist, radiographer or nurse as soon as possible.

Female patients will be asked to confirm their pregnancy status prior to radiotherapy. This applies to all women between the ages of 12-55 years. This is a legal requirement.