Patient Information for:

Radiotherapy Treatment to the Eye (Orbit)
This leaflet is for patients attending the Beatson West of Scotland Cancer Centre for radiotherapy treatment to the eye (orbit), including patients with thyroid eye disease (a benign condition). It describes the radiotherapy planning and treatment. It also explains the effects you may experience during and after treatment and how best to cope with them. We treat each patient as an individual and the effects of treatment may vary from one patient to another, therefore the information given here is intended as a general guide. Your Doctor, radiographers and nurses will be able to explain your treatment in detail.

After seeing your doctor from the Beatson Cancer Centre you will be sent a list of your appointments. This will include a visit to the Mould Room and CT simulator as well as your treatment room appointments.

If you need more information or have any questions or problems, please let us know as soon as possible.

**Preparation for treatment**

Before you can start your radiotherapy treatment we need to plan your treatment carefully to produce an individual treatment plan for you. This is done by visiting the CT simulator or simulator. You will need to have a ‘beam directional shell’ or ‘mask’ made in the Mould Room before your planning begins.

**Mould Room**

You will visit the mould room once or twice before your treatment is planned. This will depend on the kind of mask you need. The Mould Room is where the ‘mask’ or ‘beam directional shell’ (BDS) is made. This mask is usually used when the face & neck area is treated and it is made just for you. The shell keeps your head still during treatment and the radiographers use the marks on it to give
your treatment to exactly the same area each day.

The process of making the shell will be explained to you in detail by the Mould room team when you go for your appointment. Ladies may find it easier to wear a crop-top or vest, as you will need to take off your outer clothing down to your waist. If necessary, you will have a second visit to the mould room to check that the shell fits snugly and is not uncomfortably tight anywhere. Your shell is only worn during treatment and planning, not at home.

**CT Simulator**

The planning of your treatment will begin with a visit to the CT simulator (scanner). This is a special X-ray machine used to take images with you lying in the position you will be in when you are having your treatment. You will need to wear your ‘mask’ for this. The scan does not take long, usually 10-15 minutes. You must stay very still for this but you can breathe and swallow as normal. During the scan, digital images will be taken. Your doctor will use these images to decide the correct treatment for you.

**Simulator**

Before your treatment starts you will also visit the simulator. This X-ray machine will take more images to check that your treatment plan is correct. The area to be treated will be marked on your mask and used by the radiographers on the treatment unit to give you your treatment.

The number of treatments you get depends on your particular condition. Your doctor will have given you some idea of the number of treatments at your first visit. Your treatment can take from 2-4 weeks to complete, as radiotherapy is usually only given once a day, Monday to Friday,
Radiotherapy treatment

You will have your treatment on an x-ray machine called a linear accelerator. The staff who operate these machines are called therapy radiographers. They are specially trained professionals who are responsible for planning and delivering your treatment accurately. They will explain everything before treatment starts and check that you know what to expect and how many treatments you will have.

Each day when you arrive you should ‘check in’ at the hospital reception and again at your treatment room.

Each day you come for treatment your radiographers will position you just as you were in the CT scanner, with your mask on. The lights in the room will dim for a few minutes while the radiographers position you. They leave the room while the machine is on but the whole procedure does not take long. (Not more than 10 – 15 minutes). After each part of your treatment the machine is moved into the correct position for the next part. The machine will only be on for a minute or so each time.

Your radiographers will monitor you closely on closed circuit TV while your treatment is being given. It is important that you stay as still as you can during your treatment and breathe normally. The treatment is painless and you will feel no differently afterwards. Please speak to the radiographers if you have any questions or problems.

General Advice during treatment

There is no reason to change your lifestyle completely during treatment. However it may help to:

- Try to get plenty of rest, especially when the treatment begins to make you tired. It is important to try to continue your normal
daily activities and interests. A sensible balance between rest and activity may be best.

• Accept offers of help from family and friends if you need help around the house. This also allows them to feel involved in caring for you during this time.

• Speak to your radiographers or doctor if you have any problems.

_Early effects of radiotherapy treatment_

We are all individuals so the effects of treatment may vary. By following advice given to you by staff, you can help minimise side-effects. Please tell us how you are feeling, so we can help you if necessary.

_Tiredness_

You may begin to feel quite tired during treatment. This tends to start a few weeks after starting your treatment and can last for several months after treatment has finished.

_Skin_

The skin in the treated area will be more sensitive and may become pink or red. Again, this tends to be a couple of weeks into treatment. This can be treated with creams; however, it is very important that you use only those given to you by the Beatson staff.

_Hair loss_

There will be a loss of hair in the area treated only. You may find that you lose your eyelashes. This is usually temporary, although in some patients they may not re-grow.
During your treatment a nurse or doctor will see you each week. They will assess and treat any side effects, give advice and answer any questions you may have.

**Skin Care**

Radiotherapy only affects the skin that is within the area being treated and instructions on what to avoid apply only to that area.

- You may wash the area being treated. It is important to do this gently, with a mild baby soap and lukewarm water. Care should be taken when drying; it is better to pat dry than to rub with a towel.

- Make-up should not be used on the area of skin being treated. It is also best not to use eye make-up, including mascara during the course of treatment.

- When washing your hair, try to take care and avoid shampoo getting near your eye(s).

- If your eyes start to become irritated by the treatment please do not be tempted to use any ointments or drops. However soothing they may seem, they can contain substances which may react with your treatment, making your skin sore. If your doctor at the Beatson feels that you need drops and/or ointment they will be prescribed them for you. In addition, you may be given cream for your skin by the staff at the Beatson as your treatment progresses.

- If the weather is hot and sunny, it is best to try to avoid exposure to bright sunlight. For example, try sitting in the shade, wear sunglasses or a wide brimmed hat.

When your skin is no longer red or itchy you can go back to washing normally.
After radiotherapy

Your body will take some time, often 4-6 weeks before gradually returning to normal. Indeed, some people feel worse physically and mentally, when treatment is finished. Your Beatson doctor will see you at your local hospital, roughly 6-8 weeks after your treatment has finished.

Possible later effects of treatment

We believe that the benefit of your radiotherapy treatment outweigh any longer-term risks involved. However, you should be aware of these potential long-term effects, which may affect a small number of people. It is important to point out again that effects can vary from person to person and your doctor will explain specific individual issues to you personally. The following effects are a general guide:

• You will always be sensitive to the effects of the sun; especially during the first year after your treatment on the area you have been treated. Protect yourself with total sun block, sunglasses and a hat.

• You may have slightly ‘gritty’ eyes, which sometimes require long-term use of eye drops and/or ointment. Your doctor will advise you about this.

• You may lose your eyelashes permanently.

• A cataract (cloudiness of the lens) may occur because of radiotherapy. This depends on the radiotherapy dose required to treat your condition. If it occurs, it usually happens several years after treatment. Again, your doctor will be able to advise you further about this.
• A very rare but potential effect is that radiation can cause tumours. Although this is a serious possible consequence of your radiotherapy, it is important to bear in mind that it is extremely rare. If it does happen, it is likely to be many years after treatment has ended. Please do remember that we believe the benefits of your treatment for your current condition out-weigh the longer-term risks involved.

Where can I get help?

Information and support

This leaflet deals with the physical aspects of your treatment but your emotional wellbeing is just as important to us. Being diagnosed with cancer can be a deeply distressing time for you and those closest to you. Within the department we have a counselling/ support and clinical psychology service to help you if necessary. If you think this may be helpful to you, please ask staff to put you in touch.

Macmillan Information Radiographer & counsellor: 0141 301 7423

Information and Support Radiographer: 0141 301 7427

The Beatson Cancer Centre has a Radiotherapy Advice Line available for patients who have completed treatment. This is an answer machine service, which is run by experienced Radiographers from Monday to Friday. Please leave your name and telephone number and you will be called back as soon as possible. Tel: 0141 301 7432
There are also voluntary organisations providing information and support. These include:

**Cancerbackup : 0808 800 1234**  
Offers counselling and also provides information booklets on particular cancers which are free to anyone affected by cancer.

**Macmillan Cancer Support : 0808 808 2020**  
Develops services to provide specialist care at every stage of illness. Provides an information line and financial help through grants.

**Tak Tent : 0141 211 0122**  
Offers support to people with cancer.

**Changing Faces : 0845 4500 275**  
Offers help, advice and information for anyone with facial disfigurement.

**Let’s Face It : 01843 833724**  
Provides supportive links for people with experience of facial disfigurement, especially facial cancer.

Leaflet reviewed by L. Fraser-Rae  
Review Date: April 2010