Patient Information Sheet
Radiotherapy and Chemoradiation to the Face and Neck Area
This leaflet is for patients receiving radiotherapy to the face and neck area. It describes your radiotherapy planning and treatment. It also explains the effects that 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. Your doctor, radiographer, and clinical nurse specialist will explain specific aspects of your treatment. If necessary they will give you separate leaflets on chemotherapy.

**What is Radiotherapy?**

Radiotherapy is the use of carefully measured doses of radiation to treat cancer. It damages the cells and stops them dividing and growing. Most patients having radiotherapy are treated using a high energy beam of x-rays delivered to a precise area, by a machine called a linear accelerator. The rays are used to treat the tumour and a small surrounding area.

Therapy radiographers operate the radiotherapy planning and treatment machines and will be able to answer any questions or concerns that you may have.

After seeing your doctor from the Beatson Cancer Centre, we will send you a list of your appointments. This includes a visit to the Mould Room, CT simulator and in some cases a Pre Assessment visit, as well as your treatment room appointments.

You will also have an appointment once a week at the head and neck on treatment review clinic. Your Radiographers will let you know about this.

If you are in doubt about anything or have any questions or problems, please let us know as soon as possible. If you have any of your own natural teeth, you must have a dental check up before starting any treatment.
Preparation for treatment – Mould Room
Before you start your radiotherapy, we will need to plan your treatment. You will visit the Mould Room to have a ‘beam directional shell’ (BDS) or ‘mask’ made followed by a visit to the CT Simulator.

This mask is usually used when the face and neck is treated and is made just for you. The mask keeps your head and neck still during the treatment. The radiographers use the marks drawn on the mask to make sure you are in exactly the same position each day for your treatment.

If necessary for your treatment, we may ask you to use a ‘mouth bite’ which will hold your jaw steady and help to protect your mouth from some of the effects of radiation. This will also be made for you in the Mould Room.

The mould room staff will explain the process of making the mask to you in detail when you come for your appointment. Gentlemen with a beard and/or moustache are advised to shave it off before coming to the Mould Room as it is important that your skin is smooth before we start to make your mask.

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.

When you come to the CT Simulator and for treatment you will have to wear this mask. The radiographers will help you to lie on the couch and they will then fit your mask. Please let them know if you are uncomfortable as you will have to lie in this position for each treatment.

CT Simulator
Following your visit to the Mould Room, 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. These scan images will be used to produce a unique plan for your own individual treatment.

**Contrast (Dye)**
When you have your CT scan, your Doctor may wish to give you a small injection of contrast (dye) which will help us to see the area we want to treat more clearly.

Your doctor or radiographer will put a small needle (cannula) into a vein, usually in your arm. It will be taped in place and will stay in during the scan. We will inject the contrast (dye) through this needle. It may feel a little cold but you should not feel any discomfort.

Some people can have an allergic reaction to the contrast. This is rare but we will ask some questions before we begin to ensure it is unlikely to happen to you. Your doctor and radiographer will keep a close check on you during the injection and scan, so if you feel anything unusual please tell us. You will have to wait for a short time after the scan to ensure you don’t have any reaction to the dye.

**Pre Assessment Clinic**
We may ask you to attend our Pre Assessment Clinic before your radiotherapy starts. At this clinic we will finalise all the details of your treatment. We will discuss any side effects related to both radiotherapy or chemotherapy and consent you for treatment. This also gives you time to discuss your treatment and ask any questions you may have.

**Radiotherapy treatment**
When you attend for your first treatment, the radiographers will explain what will happen and answer any questions you have.
When you arrive in the department please ‘check in’ at the reception desk before going to your treatment room waiting area.

When ready to begin your treatment, your radiographers will help you to lie in the same position as you were in the CT simulator, wearing your mask. They will dim the lights in the room while they adjust you into the precise position. When they have checked all your treatment details they will leave the treatment room to switch on the machine. Your radiographers will monitor you continually on closed circuit TV.

Before your treatment begins, the radiographers may take some X-ray images to ensure you are in the correct position. You may feel the couch move slightly when they do this. When the radiographers take these X-ray pictures and deliver your treatment, the machine rotates round your body but won’t touch you. You won’t see or feel anything during the treatment.

The treatment only takes about 10 minutes.

Your treatment can take from 4-7 weeks to complete, as radiotherapy is usually only given once a day, Monday to Friday. We will explain the exact number of treatments you will have individually.

**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 and sleep, 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.

**Early effects of radiotherapy treatment**

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. You will have a weekly appointment (weekly review)
with a member of the Head and Neck team while you are on treatment. Please make sure you attend this weekly check up.

Chemotherapy and Radiotherapy
Many patients having radiotherapy are also given drug treatment (chemotherapy). The chemotherapy increases the activity of the radiotherapy against cancer cells.

If you are getting chemotherapy drug treatment during your radiotherapy course, you will be more prone to side effects discussed in this leaflet. We may ask you to come for extra blood tests and check ups to make sure you are well.

Skin Care
Radiotherapy only affects the skin that is within the area being treated and instructions relate only to the treated area.

• You may bath and shower during treatment, avoiding very hot or very cold water on the area being treated.

• You may use your normal soap. The area being treated should be rinsed, using lukewarm water, then patted dry with a soft towel and not rubbed.

• Only use the creams given to you or recommended by our staff. Any creams should be gently applied with the fingertips and not rubbed in, even if it says so on the tube. Do not use any other creams on your treatment area.

• Gents are advised not to use a wet shave, but instead to use an electric razor. Any part of your beard /moustache growth that is in the treatment area will stop growing some time after starting radiotherapy. After treatment ends, it may eventually come back, although it may be finer than before.

• Please don’t wear any make-up, or use perfume or after-shave on the treatment area.

• Avoid friction to the area being treated, such as tight clothing,
and use natural fabrics when possible, like cotton or silk, which are soft and let your skin breathe.

- Avoid exposing the area you are having treated to the sun. Lightly cover the area with a soft silk scarf, wear a wide brimmed hat or stay in the shade. Do not use sun screen/lotion on the area during treatment. After your treatment is finished and your reaction has healed, you should use sunscreen with both UVA/UVB protection minimum SPF 30 while in the sun.

- Chlorine can irritate your skin, therefore do not go swimming until after your treatment is over and your skin is back to normal.

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

Hair Loss
With radiotherapy you will only lose hair from the area being treated, where the radiation goes in and out of your body. Whether on your head or your beard, this hair loss is only temporary for most people, although for a very small number of people this loss may be permanent. You may wash your hair with a mild baby shampoo, rinsing off with lukewarm water and patting dry.

Mouth, Throat and Gullet
While you are on treatment a severe ‘sunburn’ type reaction will occur on and around the treatment area where the radiation goes in and out of your body. This may include the inside of your mouth, throat and gullet. This reaction may cause soreness, ulceration, redness, cracks and bleeding. We will give you mouthwashes, and pain killers to treat these effects. Remember, only use the medication given to you by the Beatson staff for these issues.

You may also find that your saliva becomes thicker and there is less of it. There is a separate leaflet called ‘Looking after your Mouth’, which discusses in detail how to look after your mouth and teeth during and after treatment. If you are not given this leaflet, please
ask for it and let us know if you have any worries about your mouth. These symptoms should clear up approximately 6-8 weeks after finishing treatment.

Swallowing may become uncomfortable and painful. When this happens we will give you medicine to take before meals to help you swallow and also appropriate painkillers for your pain. Contact your GP to have any medicines you already take changed to a liquid or soluble form. It is very important to continue with all your medicines. It is important you let us know if you are having difficulties.

**Soft Diet**

It may be more comfortable to take a softer diet such as scrambled eggs, soups, puddings etc, which slip down the throat more easily. Try using more gravies and sauces and avoid food that is too hot, too cold, spicy or acidic. You can increase the nourishment in your food by adding more full fat milk and cream to porridge, soups etc, and adding cheese and butter to mashed potatoes. We recommend that you try to drink as much as possible during your treatment. At least 8-10 glasses of fluid a day is ideal.

**Weight**

We will weigh you at the start of treatment and every week thereafter at your weekly review. If you lose weight or need advice, our dieticians will help you. They may prescribe food supplements or recommend that a feeding tube may be helpful. This will be explained to you in detail if it needs to be done. You will need to be admitted to the ward for a short time so we can explain how to look after your feeding tube at home.

**Taste**

Your sense of taste may change or be lost completely for some time. A common complaint is that food tastes more salty than usual. This usually improves but can take several months. Very few people lose their sense of taste forever.
Smoking & drinking
Smoking and drinking alcohol are both likely to make the side effects of radiotherapy worse. We will be happy to offer any help with giving up smoking or you can contact Smokeline yourself (see Where to get help section). During treatment, many people find it better to give up alcohol completely, especially spirits, until their mouth has healed.

Your Voice
Your voice may become hoarse or weaker for a time and avoiding smoking and smoky places will help this. Your throat may become sore and uncomfortable when talking and your voice will become tired. Speak quietly and gently, giving your voice rests throughout the day. Our Speech Therapist will be able to give you further advice if you need it.

If you have a tracheostomy (breathing tube in your throat) or have had a laryngectomy (voice box removed) the head and neck nurse or Speech Therapist will offer any extra advice you need to cope with this during your treatment. It is sometimes necessary to add extra moisture to the air you breathe, to balance any drying effect of the radiotherapy. There are many ways to do this, including different stoma protectors and a nebuliser.

Tiredness
You may get tired or fatigued as your treatment progresses. This tends to start a few weeks after starting your treatment and can last for several months after treatment has finished.

Exercise and Swelling
After neck surgery, if any of your glands have been taken away, your neck and chin area will swell slightly. This will get worse while you are having treatment but will improve slowly when treatment is completed. You will have been given exercises by the physiotherapist, after your surgery. You should continue doing these exercises moving your face and neck muscles gently, through
their full range of movement, to prevent stiffness and reduce any swelling. This should not be painful, so please let us know if you are having difficulties and we will arrange for you to see a physiotherapist.

**After radiotherapy**

Your body will take some time, often 4-6 weeks, before beginning to return to normal. Indeed, some people feel worse physically and mentally when treatment is finished. Your surgeon will see you for follow-up about 4 to 6 weeks after completing your treatment and 6 months after treatment by your team at the Beatson. It is important to keep in touch with us if you feel worse, as we can see you earlier if necessary.

**Possible later effects of treatment**

Effects vary from person to person depending upon the area being treated. Your doctor will explain particular issues that are likely to affect you.

- Due to the effect of radiotherapy, you may have a smaller amount of saliva, or it may become thicker. There are saliva substitutes available in both spray and gel form, some with fluoride. You will also be at increased risk of tooth decay. To prevent this, if you have your own natural teeth, they should be kept in good condition. Brush with fluoride toothpaste twice a day (in some cases you will be provided with a high fluoride prescription toothpaste), floss daily, use a low or non-alcohol fluoride mouthwash and see your dentist/ hygienist every 3-6 months. Always inform your dentist that you have had radiotherapy to the mouth or throat.

- 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 UVA/UVB sunscreen protection with a minimum SPF 30 and a hat.

- We spend a long time planning your treatment and shielding
areas we don’t want treated. However, the face and neck area contains a lot of important structures. The brain, spinal cord and eyes can be affected by radiotherapy, but only if they are in the area being treated, and we do our best to minimise any treatment dose to these areas. If necessary this will be discussed in detail when you consent to radiotherapy.

• 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.

Head & Neck Specialist Nurse: 0141 301 7588/9
Information Radiographer & Counsellor: 0141 301 7423
Information and Support Radiographer: 0141 301 7427
Dietitian: 0141 301 7005

We have an information Centre on Level 1 where you can find further information and signposting to other services 0141 301 7390
The Beatson Cancer Centre has a Radiotherapy Advice Line available for patients who have completed treatment. This is an answer machine service available 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**

The Cancer Centre also provides a Cancer Treatment Helpline for Urgent Calls. This service is available for patients on or within 6 weeks of cancer treatment who have urgent or severe symptoms.

Beatson 8am-8pm Tel: **0141 301 7990**
National Cancer Helpline 8pm-8am Tel: **0800 917 7711**

There are also voluntary organisations providing information and support. These include:

- **Macmillan Cancer Support**: **0808 808 0000**
  [www.macmillan.org.uk](http://www.macmillan.org.uk) – Nurses can provide information on all aspects of cancer and its treatment, and on the practical and emotional aspects of living with cancer.

- **Maggie’s Gartnavel**: **0141 357 2269**
  Maggie’s Lanarkshire, Monklands Hospital: **01236 771 199**
  Maggie’s Forth Valley: **01324 868 069**
  Maggie’s Centre provides comprehensive cancer support programme for people and their families affected by cancer.

- **Cancer Support Scotland (Tak Tent), The Calman Centre, Gartnavel Campus**: **0800 652 4531**
  Provides emotional and practical support within the Centre and the community. Complementary therapies and Counselling also available.

- **Changing Faces**: **0300 012 0275**
  [www.changingfaces.org.uk](http://www.changingfaces.org.uk)
  Offers help, advice and information for anyone who has a condition or injury that affects their appearance.
• Let’s Face It: 01843 491 291
  www.lets-face-it.org.uk
  Provides supportive links for people with experience of facial disfigurement, especially facial cancer.

• Cancer Laryngectomee Trust: 01422 205 522
  www.cancerlt.org
  Advice and help after laryngectomy.

• National Association of Laryngectomy Clubs: 020 7730 8585
  Encourages the formation of clubs, to assist rehabilitation.

• Smokeline: 0800 848484
  Offers help to give up smoking.

• Alcoholics Anonymous: 0800 9177 650
  Offers help to reduce alcohol intake by providing support in local groups. Find your local meeting at www.alcoholics-anonymous.org.uk

• Al-Anon family Groups: Phone 020 7403 0888 or visit www.alanonuk.org.uk to find your local group.

• Macmillan Benefits Team (within the Beatson) 0141 301 7374
  Provides free and confidential benefits advice for people affected by cancer.

• Beatson Cancer Centre – if you want to know more about our Centre please visit www.beatson.scot.nhs.uk