Patient information on external beam radiotherapy to the prostate or prostate bed
Side effects of prostate radiotherapy

People can receive two types of radiotherapy to their prostate gland: external beam radiotherapy (high energy X-ray beams aimed at the prostate from outside the body), and/or brachytherapy (small radioactive sources positioned inside the prostate). This information leaflet is about **external beam radiotherapy to the prostate**.

This leaflet will help you understand:

- the radiotherapy side effects you might experience
- how best to care for yourself during and after treatment.

The information combines guidance from several specialist centres to give you a clear overall picture. Remember, your treatment is tailored for you, and your team will advise you of any differences that apply to your care.

Managing and understanding side effects

Radiotherapy can cause side effects that vary from person to person. Side effects of radiotherapy are described as:

- Early/short-term - which usually start during your course of radiotherapy and usually resolve within two to six months after finishing radiotherapy.
- Late - These are side effects that may happen many months or years after radiotherapy and may be permanent.

Side effects are then described as:

- Expected (50% - 100% chance, or 50 to 100 out of 100 people)
- Common (10% - 50% chance, or 10 to 50 out of 100 people)
- Less common (less than 10% chance or less than 10 out of 100 people)
- Rare (Less than 1% chance or less than 1 out of 100 people)

Your care team will discuss these with you and give you other advice tailored to your treatment. You may not get all the side effects discussed in this leaflet.

Early/short-term side effects

Expected (50% - 100% chance, or 50 to 100 out of 100 people)

- **Fatigue/Tiredness** - Very common - most patients experience some degree of tiredness.

    - Tips: Rest when needed, break up activities into smaller tasks, and try light exercise (if approved by your doctor). Try to drink plenty of fluids, such as water and herbal tea.
- **Urinary frequency** (passing urine more often than normal), urgency (sudden urge to pass urine) and slower flow compared to normal.
    - Tips: Try to drink at least 2 litres (4 pints) of fluid every day. Avoid drinking non-herbal/ordinary tea and caffeinated coffee – you could possibly change to decaffeinated tea/coffee. Alcohol is a bladder irritant so should be kept to a minimum.

Common (10% - 50% chance, or 10 to 50 out of 100 people)

- **Hair loss in the treatment area**.
- **Bowel frequency** (opening your bowels more often than normal) and urgency (sudden feeling you need to open your bowels).
- **The urge to open your bowels without actually passing anything** - this is called tenesmus.
- **Looser stools with more mucous or wind** compared to normal.
  It is quite normal for all of us to produce gas throughout the day. It can be caused by bacteria breaking down the food we eat, or it could come from the amount of air we swallow when eating and drinking. Certain types of food can also cause gas. The Therapeutic Radiographers will be able to see on your treatment images if there is too much gas in your bowel at the level of your treatment area.
    - Tips to help reduce bowel gas during radiotherapy:
        - It is important that you continue to eat regularly during your treatment, so avoid cutting out meals.
        - If you know that something in your diet tends to cause gas, then try to not eat or drink it for the duration of your radiotherapy.
        - Avoid fizzy drinks and beer.
        - Avoid excessively fatty food.
        - Avoid beans and pulses (some common pulses include: chickpeas, lentils, kidney beans and peas.)
        - Avoid vegetables such as: broccoli, cabbage, cauliflower, Brussels sprouts, onions, garlic and leeks.
        - Avoid chewing gum as it may have the tendency to increase gas within the digestive system (due to the increase of contractions which move food through the intestines.)
        - Chew food slowly.

- Eating a little cooked oats, barley or ground linseeds can help with wind and bloating, but please avoid these if you have loose bowels or develop loose bowels after eating them. (If you are gluten intolerant, there are gluten free oats available in shops/online, but all barley contains gluten.)
- Sip peppermint tea
- Keep active and take regular exercise to encourage bowel movement.

Less common (less than 10% chance, less than 10 out of 100 people)

- **Skin irritation and colour changes in treatment area** – white/lighter skin: pink, red, darker than surrounding area; brown skin: maroon or darker than surrounding area; black skin: darker than surrounding area, yellow/purple/grey colour changes
- **Cystitis/pain when you urinate** – due to bladder inflammation
- **Rectal pain/discomfort** – due to rectal inflammation
- **A feeling of not completely emptying your bowels**
- **Bleeding from your bladder or bowel** – usually mild

Rare (Less than 1% chance, less than 1 out of 100 people)

- **Urinary retention** – not being able to pass urine, which may result in needing a urinary catheter
- **Urinary incontinence** including urine leaking

Late/long-term side effects

These are side effects that may happen many months or years after radiotherapy and may be permanent.

Expected (50% - 100% chance, or 50 to 100 out of 100 people)

- **Infertility** – Radiotherapy will affect your fertility. Please let us know about your plans for having children and we can advise accordingly.

Common (10% - 50% chance, or 10 to 50 out of 100 people)

- **Urinary daytime/nighttime frequency** (passing urine more often than normal)
  and urgency (a sudden urge to pass urine)
- **Bowel urgency** (a sudden urge to open your bowels)
- **Looser stools** – with more mucous or wind compared to normal

- **Changes in ejaculate** – such as reduced amount, dry, altered consistency or blood stained
- **Loss of orgasm**
- **Change to penile length/appearance**
- **Inability to achieve an erection**

Less common (less than 10% chance, less than 10 out of 100 people)

- **Cystitis/pain when you urinate** – due to bladder inflammation
- **Incomplete emptying of your bladder or reduced bladder capacity**
- **Urinary stricture** (a narrowing in your water pipe which may require surgery)
- **Bowel frequency** (opening your bowels more often than normal)
- **Inflammation of the rectum, which may cause pain when opening your bowels**. This may also affect your sex life if you receive anal sex
- **Bleeding from your bladder or bowel**
- **Intermittent abdominal discomfort**

Rare (Less than 1% chance, less than 1 out of 100 people)

- **Urinary incontinence, including urine leaking**
- **Pelvis/hip bone thinning** and/or fractures
- **Bowel/bladder damage which may require surgery** – due to perforation (hole)
- **Fistula** (abnormal connection between two parts of your body)
- **Bowel obstruction** (blockage) or severe bleeding
- **An increased risk of a different cancer in the treatment area**

If you had radiotherapy to your pelvic lymph nodes:

- **Lymphoedema** – fluid build-up in your legs and potentially your scrotum
- **Malabsorption** – problems with nutrient absorption
- **Neuropathy** – damage to nerves which could cause pain, numbness or weakness in your legs.

It is important to note that whilst some of these side effects sound worrying, the benefit of giving you radiotherapy outweighs any of the risks. Specific risks are considered for each individual and will be discussed with you if they differ from those above.

More support

For further advice or help, please refer to:

- **Your radiotherapy team:** They can provide more information tailored to your individual treatment plan during your treatment. If you are having any problems related to your radiotherapy after treatment, please contact your radiotherapy team (the team that provided skin care etc. during treatment).
- **How to contact your radiotherapy team**: The numbers are given to you at the beginning of your radiotherapy. If you can't find the numbers, please ask for them and then keep them handy in case you need urgent advice. You will also receive contact numbers in the information given to you when you finish your radiotherapy treatment.
- **National support services**:

Cancer support charities such as Macmillan and Maggie's, offer information, counselling, and support groups.

- Macmillan website: www.macmillan.org.uk
- Macmillan Support Line: 0808 808 0000
- Maggie's: www.maggies.org
- Prostate Cancer Research – The info pool: https://www.theinfopool.co.uk/

This leaflet has combined information from several specialist radiotherapy centres. It provides a comprehensive guide on what to expect during and after your radiotherapy treatment. While every patient's experience is unique, the key points above should help you prepare and know when to seek help. Always follow the specific instructions provided by your healthcare team.
Please remember: this document is for general information purposes. For personal advice, refer to the instructions and support offered by your own treatment team.

We welcome your feedback on this information leaflet. If you would like to give us feedback to improve this information, please complete our feedback form by scanning the QR code or clicking on the link.
https://forms.office.com/e/6spj6B4HQk

For more information about radiotherapy, please see our website: https://eastofenglandradiotherapynetwork.nhs.uk/ and click on 'Information for patients'