Nuclear Medicine Radium Therapy

Patient Information Sheet

Radium is used when prostate cancer has spread to the bones, developing bone metastases which can become painful. The Radium pharmaceutical is injected into a vein approximately every four weeks over a six-month period. Once it has been injected, Radium behaves like calcium and is absorbed by the affected bones which will help to give relief from pain.

Preparation for your appointment

You will have an assessment by your consultant approximately 10 days before each therapy injection.

If you are taking Calcium and Vitamin D supplements, please stop taking them for three days before each treatment starts, and do not restart them for three days after each treatment.

For your therapy appointment, you can eat as normal.

Being well hydrated can make it easier for the technologist to find your veins and give you your injection. Please drink 2-3 litres of fluid over the 24 hours before your appointment (not including caffeinated drinks or alcohol). You can use the toilet as normal.

If you use a catheter, please let Clinical Imaging and Measurement know before you attend for your treatment (the telephone number is at the end of this leaflet).

This treatment is very expensive so if you are unable to attend for your appointment, please let us know as soon as possible.

It is fine if you want someone to come with you on the day of the treatment. However, due to the radiation involved, please do not bring along a child or a pregnant woman

Are there any risks from the radioactive Radium?

The amount of Radium injected is calculated based on your weight to provide effective treatment with as little radiation dose as possible. Your consultant has considered that the benefit to you from your treatment far outweighs the risks from the radiation.

How is the therapy performed?

The Radium is injected through a small needle or venflon that will be placed into a vein. The injection will be given slowly, over about a minute. You can leave the hospital straight after the injection has been given.

A course of six injections will be given, with injections scheduled every four weeks. You will also have an appointment with your consultant a week before each injection to check your blood tests show you are well enough to receive therapy.

How will this therapy affect you?

The treatment will not affect your ability to drive home so it is not necessary for anyone to accompany you.

The Radium is absorbed into the bone metastases. Sometimes pain can worsen about 24-36 hours following the injection, and this can last for about 36-48 hours. It is important that you increase your painkillers to cover this period, if required. Your pain should then improve but it is important that you reduce your painkillers gradually.

Previous studies have shown that there is a small possibility of constipation, some diarrhoea, and nausea. If these occur, they should be of short duration.

You should drink plenty of fluids for 24 hours after the injection.

Will the radiation affect other people?

The Radium is absorbed into your bones and emits radiation as it decays. During the first week after each treatment, there may be some radioactivity in your blood, stools and urine, so there are a few precautions that we would like you to follow for the week following each treatment:

- When passing urine, sit on the toilet instead of using a urinal
- After passing urine or opening your bowels, flush the toilet twice and wash your hands thoroughly
- If any blood, urine, stools, or vomit needs to be handled, please use medical gloves to clean up using tissues, and flush the tissues away
- Immediately wash any stained bedding or clothes separately from other items, and rinse them thoroughly
- Avoid having any samples of blood, urine, or stools taken for the first week after treatment. Contact Clinical Imaging and Measurement for advice if necessary (telephone number at the end of this leaflet).

The RUH, where you matter

- If you are sexually active, please use a condom for the first week after each injection. You should also avoid fathering children until **six months** after the end of your treatment.
- We will give you a contact card to carry for one week after each injection, detailing the treatment that you have received. You should show this card to any medical staff you have contact with, so that they know that you have received treatment with Radium.

Travelling after your therapy

Some airports, seaports, train stations, bus stations and major sporting event venues have installed very sensitive radiation detectors. It is possible that these detectors may be triggered by the radioactivity remaining in your body following your treatment. Therefore, if you are planning to travel within three months of your treatment it is recommended that you carry your appointment letter to show to officials if necessary.

Information for other hospitals or care homes

Within the three months following your last injection:

If you are admitted to a care home or hospital (other than the RUH), or if you are cared for by a healthcare worker in your home, please ask them to contact the RUH Clinical Imaging and Measurement department. Their employer might need to register with the Health and Safety Executive to show that their staff are aware of the radioactivity that is present after your treatment.

If you have any concerns or questions about your scan, or you need this information in another format such as larger print, please call: **01225 824080**

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Please contact the Patient Support and Complaints Team (PSCT) if you would like to feedback your experience of the hospital. Email ruh-tr.psct@nhs.net or telephone **01225 825656**

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