

## Patient information factsheet

# Stereotactic radiosurgery or radiotherapy to the skull base

We have given you this factsheet because your doctor has recommended you have stereotactic radiosurgery (SRS) or stereotactic radiotherapy (SRT). It explains what SRS / SRT is and what to expect at your appointments. We hope it will help to answer some of the questions you may have. If you would like more information or have any concerns, please speak to a member of your healthcare team.

### What is the skull base?

The base of the skull runs from the eyes to the back of the head and separates the brain from the eyes, nose and ears. Important blood vessels and nerves (called the cranial nerves) pass through the skull base. The cranial nerves are important for your vision, hearing, balance, smell, taste, facial sensation, facial muscle movement, swallow and voice.

### What is stereotactic radiosurgery (SRS) or stereotactic radiotherapy (SRT)?

Stereotactic radiosurgery or radiotherapy is a non-invasive procedure used to treat tumours. The aim is to achieve similar results to having surgery. It does not involve any surgical incisions, so there is no long healing process. This means that you should be able to continue with your normal activities soon after your treatment.

For the treatment itself, we use a specialist radiotherapy machine which directs high energy x-rays to treat a small, focused area of the brain. Like other radiotherapy, it works by damaging the cancer cells' DNA (division and growth mechanism). The aim is to prevent the cells from multiplying and dividing, so that the tumour will stop growing and will shrink or die.

We will give you the treatment in either a single session (stereotactic radiosurgery - SRS), or for up to five days (stereotactic radiotherapy - SRT). Both these treatment options are often referred to as SRST. Your doctor will decide which option is appropriate for you.

### Before your stereotactic radiosurgery or radiotherapy

Before your treatment, you will have an appointment to meet the team who will be looking after you. They will discuss what will happen during your treatment in more detail with you. This will include an explanation of how the procedure is performed, the benefits to you and any possible side effects or risks. You will have time to ask questions if you are unsure about anything.

They will ask you to sign a consent form to confirm that you agree to have the treatment. You may be prescribed a course of oral steroids to take before you start treatment to minimise the risk of some side effects. If you are already taking steroids, your dose may be increased.

## SRST planning

To enable us to deliver the treatment accurately, your head must remain completely still during the procedure. To prepare for this, we will invite you to a planning appointment a few weeks before your SRST treatment.

At this appointment, we will make you a plastic mask which will be used to hold your head and neck in position during the treatment. The mask is designed so that you can breathe normally. The mask does not hurt and can be easily removed. Please do not cut your hair after your mask has been made as this could alter its fit. If you have a beard or moustache, you may be required to shave it off before the mask is made to ensure the mask fits correctly.

Once your mask has been made, you will have a CT scan while wearing it. You will also have an MRI scan (you will not need to wear the mask for this). The images from these scans will help us to plan your treatment. Your specialist radiographer will explain the whole process to you and will make sure you know where you need to be and when.

## What to expect when you come in for treatment

The amount of time between the planning scans and the treatment will vary for each person but is usually between ten days and three weeks. You will need between one and five treatment sessions, depending on your doctor's recommendation. Each treatment appointment is likely to last approximately 45 minutes to an hour. However, you may be in the department for a few hours overall, so you may wish to have someone with you.

SRST is completely painless but you are likely to hear a buzzing noise from the machine. You will be on your own in the treatment room, but the radiographers will be watching you on television monitors at all times. They will be able to talk to you and can come into the room quickly if needed.

We may ask you to remain in the department for a while after the treatment for monitoring before you go home, to make sure you are feeling well. Most people feel completely fine after treatment. You can continue to eat and drink normally, but please note that you must not drive. We will discuss this with you in more detail at your appointment.

## Side effects

It is possible that you may experience some side effects after treatment. Below are some potential side effects which may occur after SRST to the skull base. The actual side effects you are likely to experience will depend on the area of the skull base that is being treated with SRST. We will discuss this with you in detail at your clinic appointment and document it on your consent form.

- **Skin reaction:** The skin in the area may become slightly red for some days afterwards. You may experience some patchy hair loss, although for most people this will grow back.
- **Tiredness:** The treatment can make you feel quite tired, which often continues for several days.
- **Headache:** You may experience some nausea, dizziness and headaches in the days and weeks following your treatment. You can help with the headaches by taking paracetamol.
- **Pituitary dysfunction:** Radiation to the pituitary gland can cause changes in hormone production. This will be discussed with you in more detail if it is a possible side effect of your treatment.

# Patient information factsheet

- **Hearing changes:** Radiotherapy to some areas of the skull base can cause changes to hearing, including hearing loss. Your doctor will talk to you about this if it is relevant to your treatment.
- **Visual changes:** There is a small risk of changes to your vision if the tumour is close to the optic nerve. We will discuss this with you in detail and document it on your consent form if it is relevant to your treatment.
- **Increased risk of secondary tumours:** As with any radiotherapy treatment, there is a small risk of a tumour developing in the normal tissue years after receiving SRST.

## Contact us

If you have urgent symptoms relating to your current radiotherapy treatment, please call the **acute oncology service** at Southampton General Hospital on telephone: **023 8120 1345**.

This number is answered 24 hours a day, seven days a week, but is only for treatment-related symptoms. It is **not** for general queries to do with rearranging appointments or hospital transport, for example.

If your symptoms are not urgent, you can speak to one of the radiographers when you attend for your radiotherapy treatment.

In an emergency call **999**.

You can also use the following telephone numbers to contact a member of staff directly:

### Radiotherapy reception

Telephone: **023 8120 8568** (Monday to Friday, 8am to 6pm)

### SRS advanced practitioner

Telephone: **07826 062387** (Monday to Friday, 9am to 5pm)

If you reach the answer phone please leave a message so that we can return your call.

For a translation of this document, or a version in another format such as easy read, large print, Braille or audio, please telephone **0800 484 0135** or email **patientsupporthub@uhs.nhs.uk**

For help preparing for your visit, arranging an interpreter or accessing the hospital, please visit **www.uhs.nhs.uk/additionalsupport**