University College London Hospitals
NHS Foundation Trust

National Hospital for Neurology and Neurosurgery

CT myelogram

Lysholm Department of Neuroradiology

uclh

If you would like this document in another language or format or if you require the services of an interpreter contact us on 020 3448 4744. We will do our best to meet your needs.

Contents

This booklet has been written by the Lysholm Department of Neuroradiology at The National Hospital for Neurology and Neurosurgery (NHNN). The aim of the booklet is to provide information about CT myelograms. It is intended for use by patients (or their families or carers) who have been referred to our service for this procedure. It is not intended to replace discussion with your consultant.

If you have any questions about CT myelograms a member of the Neuroradiology team will be happy to answer them for you.

What is a CT myelogram?

A CT myelogram is an examination which provides detailed information about your spinal cord and nerve roots (the part of the nerve which comes from the spinal cord).

A liquid called an x-ray contrast agent (sometimes called a dye) is injected into the fluid-filled space around the spinal cord. A CT scan is then performed and the injected fluid can be seen on the scan. The information obtained can help to make a diagnosis or to plan your further treatment.

A CT or Computerised Tomography scanner is a type of x-ray machine that produces highly detailed cross-sectional images of the inside of the body. The patient moves

through the hole in the middle of the scanner on a bed whilst the x-rays are being taken. The x-ray signals are read by a computer to form an image.

Picture 1. CT scanner with table in position.

Siemens Somatom Definition AS+ CT scanner

How can a CT myelogram help?

A CT myelogram can show any compression on the spinal cord or nerves within your spine which could be causing symptoms.

This type of examination is used for patients unable to have an MRI, for example patients who have pacemakers. In some cases a CT myelogram may be performed to provide more information after an MRI scan has been performed.

What are the risks of a CT myelogram?

All treatments and procedures have risks and we will talk to you about the risks of CT Myelograms.

- Like all x-ray machines, a CT scanner produces potentially harmful x-rays, which can cause tumours to develop in the future. Modern equipment and techniques are designed to keep the radiation (x-ray) exposure as low as possible. The dose of radiation for this procedure is about the same as you would experience in your normal day to day activity living in the United Kingdom over a period of about four to five months.

- X-rays can be harmful to unborn babies. If there is any possibility that you could be pregnant or if you are pregnant please inform your doctor immediately. To reduce the risks for women of child bearing age, CT myelograms are usually performed within the first ten days of the menstrual cycle.

Problems that may happen straight away

- Some stinging occurs when the local anaesthetic is injected into the skin; however this only lasts for a couple of minutes.
- You may feel some discomfort when the contrast is injected, for example a heavy feeling down your legs.
- An allergic reaction to the contrast dye used.

Problems that may happen later

- Some people experience a headache immediately after or within a day or so of the myelogram. This is usual and can be relieved by simple painkillers such as paracetemol. Drinking plenty of fluids reduces the risk of headache and will also help to relieve it.

Problems that are rare, but serious

To date there have been no reported cases of these complications in this department. Whilst serious complications remain very unlikely, they can include:

- nerve root damage
- meningitis
- epidural abscess
- contrast reaction
- CSF leak or haemorrhage

The Radiologist will discuss all possible risks with you and give you the opportunity to ask questions.

What will happen if I choose not to have a CT myelogram?

The decision to have this diagnostic examination is entirely yours. To decline the procedure will not affect your care. It may mean, however, that your consultant cannot be as certain or specific about any future treatment or procedures.

What alternatives are available?

Your referring consultant will discuss alternative investigations with you and their risks and benefits. These may include CT scan or MRI.

How should I prepare for this procedure?

You will be admitted to hospital on the morning of the procedure. A member of the nursing staff on the ward will complete an admission checklist with you and give you an identity bracelet to wear whilst you are in hospital. You will be offered a hospital gown or you can bring your own loose, comfortable clothing if you prefer. All jewellery and hair clips should be removed.

We will ask you about all of the medicines you are taking especially anticoagulants such as warfarin or heparin, or antiplatelet agents such as aspirin, clopidogrel or dipyridamole. These medicines may need to be stopped before your procedure. The clinical team organising your admission will advise you. Please do not stop taking any medicines until you have been advised to do so.

The staff will also need to know about any previous reactions you have had to contrast dye or any allergies you may have including iodine or shellfish.

On the day of the procedure you can eat and drink normally and take all of your usual medications, except for those mentioned above. It is advisable to be well hydrated prior to this test.

Asking for your consent

We want to involve you in all the decisions about your care and treatment. If you decide to go ahead with treatment, by law we must ask for your consent and will ask you to sign a consent form. This confirms that you agree to have the procedure and understand what it involves. Staff will explain all the risks, benefits and alternatives before they ask you to sign a consent form. If you are unsure about any aspect of your proposed treatment, please don't hesitate to speak with a senior member of staff again.

What happens during a CT myelogram?

The nurse caring for you will escort you to the x-ray department for your test. A Radiologist (radiology doctor) will explain what will happen and answer any questions you may have.

We will ask you to lie on the examination table either on your front or on your side. The Radiologist will clean the

skin on the lower back at the site where the needle is to be inserted. A local anaesthetic is injected into the skin to numb the area.

A fine needle is inserted into the fluid-filled space below the spinal cord. X-rays are taken to help position the needle correctly. During this part of the procedure a small amount of cerebrospinal fluid may be drained off and sent to the laboratory for analysis. Once the needle is in the correct position the x-ray contrast is injected slowly. The needle is then removed.

You will be transferred onto a trolley and taken to the CT scanner where more detailed images can be obtained.

The Radiologist will ask you to lie on the CT table and we will try to make you as comfortable as possible. Throughout the scan it is very important to lie still to ensure the best possible images are obtained.

What should I expect after a CT myelogram?

After the procedure you will be taken back to the ward. On the ward you must remain in bed for two to three hours with your head raised on several pillows. It is very important that you do not lie flat in order to prevent a headache occurring.

You will be required to stay overnight in hospital. You can resume normal day-to-day activities after discharge.

The Radiologist who performed the procedure will write a report to your referring doctor. They will discuss the test results with you at your next consultation.

If you experience any of the following you should contact your GP or go to the nearest Accident and Emergency Department:

- severe headache which is not relieved by pain relief medicine or lasting more than 24hours
- drowsiness
- fever
- new symptoms such as weakness or numbness in your limbs
- difficulty passing urine or moving your bowels
- dizziness
- discharge of blood or fluid from the needle site in your back

How to contact us

Lysholm Department of Neuroradiology

The National Hospital for Neurology and Neurosurgery

Queen Square

London

WC1N 3BG

Reception Direct line: 020 3448 4744

Appointment queries: 020 3448 3444

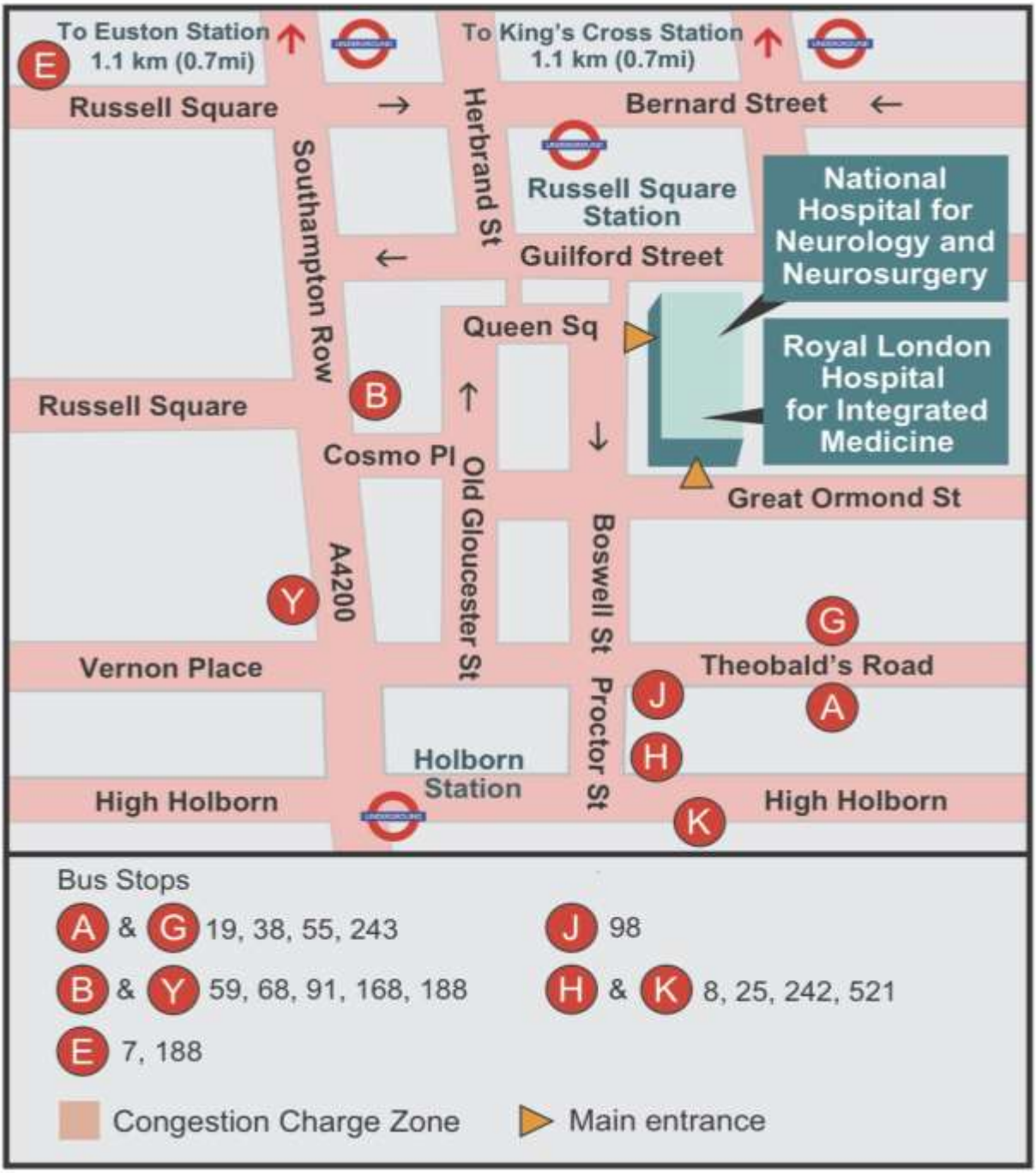
Fax: 020 3448 4723

Consultant Radiologist via Reception (above) or direct line: 020 3448 3583 or 020 3448 3444

Switchboard: 0845 155 5000 or 020 3456 7890

Website: www.uclh.nhs.uk/ nhnn

Where to find us



Space for notes and questions

Publication date: September 2013
Date last reviewed: November 2015
Date next review due: November 2017
Leaflet code: UCLH/NHNN/NRAD/CTM/PIL01