

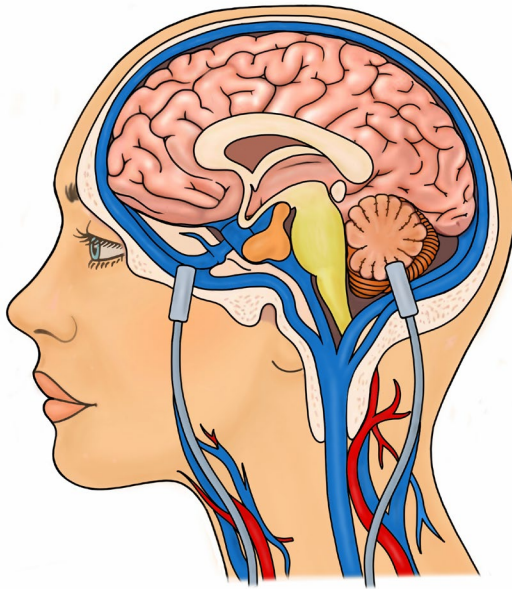
Interventional Radiology Inferior Petrosal Sinus Sampling (IPSS)

Information for patients



Your doctor has recommended for you to have an **Inferior Petrosal Sinus Sampling**. This leaflet will explain what the operation involves, the outcomes and the possible risks.

What is an inferior petrosal sinus sampling (IPSS)?



Inferior Petrosal sinus sampling (IPSS) is a diagnostic procedure used to identify the source of excess hormones, such as adrenocorticotrophic hormone (ACTH) usually produced by a pituitary lesion.

This procedure helps healthcare providers determine the cause of hormone imbalances and plan appropriate treatment.

How do I prepare?

When you arrive in radiology theatres on the day of your procedure, you will be seen by a nurse who will check information such as what medications you are taking, if you have any allergies and any relevant past medical history. They will also check your blood pressure and insert a cannula into the vein in your hand or arm.

You will then be seen by the radiologist responsible for doing your procedure who will explain step by step what will happen including any risks involved, you will then be given the opportunity to ask any questions. If you are happy to proceed you will be asked to sign a consent form. You will be asked to change into a gown and remove all underwear prior to going into the procedure room.

A cannula will need to be in place to provide you any medication throughout the procedure, this will also be used to administer anaesthetic medicine. You will then be taken to theatre, where a team of radiologists, anaesthetists, nurses and radiographers will be setting up for your procedure.

You will be shown where to lay on the x-ray table and be made as comfortable as possible.

How is it performed?

Consent

Before the operation, the neuroradiologist will meet you in our recovery area to discuss why we are doing the procedure and the risks. This is where you give your consent. This is a good opportunity to ask any questions you might have about the operation. You may withdraw consent up to the point of anaesthetic.

Anaesthetic

At the start of the procedure, you will be given an injection of local anaesthetic into the skin and tissue in both the right and left groin, to ensure you are comfortable and pain-free throughout the procedure.

Operation

Before the procedure starts, a cannula will be inserted into a vein on your arm or hand. You will be brought inside the theatre and you will be given a drug called CRH (Corticotropin-releasing hormone), this will help the doctor identify the source of high levels of adrenocorticotrophic hormone (ACTH), which can help differentiate between different causes of hormone imbalances. A thin, flexible tube called a catheter will be inserted into a vein in your groin. Using imaging guidance, the catheter will be threaded through the blood vessels to reach the petrosal sinuses near the pituitary gland. Once in place, multiple blood samples will be collected from the petrosal sinuses and the catheter in your groin to measure hormone levels.

Staff involved

Interventional Radiology (IR) procedures are performed by a multidisciplinary team. The team includes the following key Staff:

- **Interventional Radiologist (Consultant/Fellow):** A doctor specially trained in minimally invasive, image-guided techniques who performs the procedure.
- **Radiology Nurses:** Highly trained nurses who care for the patient before, during, and after the procedure. They assist with sedation, monitor vital signs (heart rate, breathing, oxygen levels), and may “scrub in” to assist the radiologist directly.
- **Radiographers:** Experts in imaging equipment who operate the machines to provide real-time guidance for the doctor.
- **Senior Clinical Support Workers (SCSWs):** Assist with the setup of the room, patient positioning, and maintenance of sterile conditions.

What are the risks?

While petrosal sinus sampling is generally safe, there are some risks associated with the procedure, including:

- Severe groin haematoma (that requires operation or blood transfusion or delays discharge).
- Stroke (0.5%).
- Migraine.
- Temporary memory loss.
- Confusion (0.5%).

- Allergic reaction to contrast dye (mild symptoms like nausea, itchiness and rashes occur in 3%; moderate to severe symptoms such as severe vomiting, bronchospasm occur in less than 1%; risk of death is rare, estimated at 1:170,000)
- X-rays will be used to make images of your body and guide your doctor during the procedure. X-rays are a type of radiation. We are all exposed to low levels of natural radiation as part of our everyday lives and medical x-rays give an extra dose of radiation. Radiation can increase your chances of developing cancer many years or decades after the exposure. The chances of this happening to you as a result of this procedure are considered to be very low.
- In some very rare situations, you might experience some hair loss or some reddening of the skin in the area that was imaged. If this happens, you should contact your clinical team who will be able to give some advice on the simple steps you can take to look after your skin.
- It is important to remember that your doctor thinks that the benefits of this procedure outweigh any risks from the radiation. We will make sure that the amount of radiation used in your procedure is as low as possible.

What else to expect from this operation?

Admission

Most inferior petrosal sinus sampling can be done as a day case procedure however an overnight admission to the hospital may be required if you don't have a responsible adult to remain with you for 24 hours following your procedure.

You will be asked to attend Radiology Theatres at 8am on the morning of your procedure. If you require an overnight admission, you may be asked to attend ward L26 which is the admissions ward. You will be informed of where to go by the bookings team when your appointment is made.

Recovery

Your recovery may vary depending on the size and location of the sheath used for the procedure. If you have a sheath in your groin, the hole in the artery will either be closed with a small plug or using firm pressure for around 10 minutes.

If a plug is used you will be able to sit up immediately and mobilise after 2 hours of bed rest. You will be monitored in the recovery area before going back to the ward. It is normal to sometimes experience some discomfort or bruising at the catheter insertion site.

Aftercare

If you experience any discomfort while in the hospital, it is important to highlight this to the nurse looking after you on the ward. You may be advised to avoid strenuous activities for a short time and to keep the insertion site clean and dry.

Care at home

All being well, you will normally be discharged on the same day.

- **Exercise:** It is advisable that you rest for the first 24 - 48 hours after your procedure and avoid going up and down stairs too frequently and do not carry out any heavy lifting, you should not do any strenuous exercise during this time.
- **Work:** You will usually be able to get back to your normal activities the day after the procedure. However, you should avoid doing anything strenuous for at least 48 hours after you have been discharged.
- **Driving/travel:** It is recommended that you do not drive for 2 days post IPSS.
- **Medicines:** The radiologist will advise you when to restart any medication that was stopped for the procedure, as well as the specialist nurse on the day case ward before going home.
- **Results:** The radiologist will discuss the result of the sinus sampling after the procedure. The management plan may need to be discussed at MDT with the surgeons, and the radiologist or the neurosurgeon will write to you with the results.
- **Follow-up:** Your doctor will schedule follow-up appointments to check your progress and plan any further treatments based on the results of the sinus sampling.

Contact information

We hope some of your questions have been answered by this leaflet. If there are any questions you would like to ask before you come for your operation, please get in touch.

Via telephone

- **Interventional Radiology LGI**
Telephone: 0113 392 3311
(Monday - Friday from 9am until 5pm, except bank holidays)
- **Ward 24 LGI**
Telephone: 0113 392 7424 (Out-of-hours)
- **Ward 25 LGI**
Telephone: 0113 392 7425 (Out-of-hours)
- **Neuro Nurse Specialists**
Telephone: 0113 392 5666 or 0113 392 3148
(Monday to Friday from 9am until 4pm, except bank holidays)
- **Your GP or NHS direct on 111** (routine) /
999 (emergency)

Via email

- leedsth-tr.radiologyenquirieslgi@nhs.net
(We will aim to answer your query within 1-3 business days).

How to get to our department

We are located in the Jubilee Wing of LGI, Ground Floor. Scan the QR code or follow the link below for more information on how to find us.

www.accessable.co.uk/leeds-teaching-hospitals-nhs-trust/leeds-general-infirmary/access-guides/jubilee-wing





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