



**Imaging**



**Brighton and Sussex  
University Hospitals**  
NHS Trust

# Venous Sampling

Information for patients

## What is Venous Sampling?

Venous sampling is a procedure that involves inserting a catheter (thin tube) into a specific vein or veins, taking blood samples from them and sending them to the laboratory for testing. The results can help the doctors looking after you to make decisions about any future treatment.

## Why do I need venous sampling?

The doctors in charge of your case are trying to find if there are any abnormalities in your blood results to decide which treatment you require. For example:

- **Adrenal Venous Sampling (AVS)** – is when blood samples are taken from the veins of the adrenal glands. This is usually done for patients with a particular form of high blood pressure.
- **Parathyroid Venous Sampling (AVS)** – is when blood samples are taken from the veins in the area of the parathyroid glands to help determine any abnormality.

## Who has made the decision?

The Consultant in charge of your case, and the Interventional Radiologist (the doctor who specialises in Imaging Procedures) who will be carrying out the venous sampling will have discussed the situation, and feel that this is the best option. However, you will also have the opportunity for your opinion to be taken into account and if, after discussion with your doctors, you do not want the procedure carried out, then you can decide against it.

## Who will be performing the venous sampling?

A specialist doctor called an Interventional Radiologist. Interventional Radiologists have special expertise in using X-ray equipment and in microsurgical techniques.

## Where will the procedure take place?

In the Imaging Department, in a special Interventional Radiology (IR) Procedure Room which is designed for these specialised procedures. You will be checked into the department by a nurse, who will ask some medical questions and fill out some paperwork. The Interventional Radiologist will then talk to you about the procedure, and you will have the opportunity to ask any questions or raise any concerns. Only if you are happy to continue with the procedure will you be asked to sign the consent form.

## What happens during venous sampling?

It is performed in the IR procedure room. You will lie on a special x-ray table on your back and be covered with sterile drapes.

- Your groin or neck area will be cleaned with an antiseptic solution. The Interventional Radiologist will talk with you about which area he or she plans to use when you sign the consent form before the procedure starts.
- Local anaesthetic will be injected to numb the area and stop you feeling pain. When the groin or neck is numb, a thin tube (catheter) is positioned into the vein/veins using x-ray guidance.
- Contrast (x-ray dye) is injected into the catheter and viewed on an x-ray screen. This confirms that it is in the right position.

- When the catheter is in the right position the radiologist will begin to take the blood samples that are required. Once the blood samples have been taken, the radiologist removes the catheter and will press gently on the entry site. This prevents bleeding. The procedure usually takes around one hour.

Sometimes it can be difficult to insert the catheter into narrow veins or difficult to locate certain veins. This makes it difficult to get adequate blood samples. Occasionally the test may need to be repeated, or it may not be possible in all patients due to medical and/or technical issues.

## How do I prepare for venous sampling?

To prepare for the procedure you will need to make sure you do the following:

Please let us know if you are taking any **antiplatelet medicines** (for example, Aspirin, Clopidogrel) or any **medicines that thin the blood** (for example, Warfarin), as these may need to be withheld temporarily before the procedure. Call the IR department for advice as soon as you get your appointment letter on **01273 696955 Ext. 4240/4278** and ask to speak to one of the IR nursing team.

If you are taking **medicines for diabetes** (for example metformin) or using insulin, then these may need to be altered around the time of the procedure. Call the IR department on the numbers above for advice as soon as you get your appointment letter.

For these procedures there are certain drugs that you may need to stop taking so they don't affect the results of the blood samples. If your doctor has not told you about this please call us to confirm what you can and can't take.

You cannot eat or drink anything (except water) for four hours before your procedure. You can drink water up to two hours before your procedure.

You will need a responsible adult to take you home.

## Will it hurt?

When the local anaesthetic is injected it will sting for a moment but the stinging will wear off leaving the area of skin numb. After this the procedure should not be painful however if you feel discomfort there will be a nurse with you will be able to arrange for further anaesthetic or sedation, if it is required. After the contrast medium (x-ray dye) is injected you will get a warm sensation. You will be awake for the procedure and you will be able to tell the nurse or radiologist if you feel any pain or are uncomfortable in any other way.

## How long will it take?

Whilst every patient and every patient's situation is different we allow an hour for the procedure.

## What happens afterwards?

You will be required to recover in our recovery area either on a trolley or chair and will stay in the department for 1-2 hours after the procedure. The nurses will carry out routine observations, blood pressure, pulse and monitoring of the skin entry point, to ensure there is no bleeding. Please arrange for someone to pick you up and take you home and remain with you for 24 hours following the procedure, as you **must not drive or use public transport or be at home alone.**

## What are the risks?

Despite the possible complications the procedure is normally very safe. However, the following side effects may occur:

- Bruising in the groin area or neck area depending upon where the catheter was inserted. This is very rare and usually resolves within a few days.

Some damage to the vein, caused by the catheter (this is very rare). This may need to be treated by surgery or another radiological procedure. The Radiologist will discuss all risks with you before the procedure and you can decide if you want to proceed then.

## What are the benefits?

Venous sampling can provide important information about how certain glands or organs in your body are functioning. This information cannot always be found out in other ways. For example, venous sampling can provide information about:

- Potential causes of high blood pressure
- Whether or not surgery is needed
- The location of certain glands that can be difficult to see with other imaging
- The presence of disease in some glands.

## Afterwards

Typically, you will be observed for a couple of hours in the recovery area on a stretcher and go home the same day.

You will need to rest for the remainder of the day, and possibly the next day depending on your recovery. You can then resume your normal activities but should avoid heavy lifting for 48 hours.

You will need to have a responsible adult to take you home.

Continue with your normal medication as prescribed, but if you take metformin tablets please do not take them for the next two days.

**If you feel you need urgent medical attention or are worried about anything** please contact the IR department Monday - Friday 9am - 5pm, your GP, or go to your nearest A&E department.

## Finally

Some of your questions should have been answered by this leaflet but remember that this is only a starting point for discussion about your treatment with the team looking after you.

**Make sure you are satisfied that you have received enough information about the procedure before you sign the consent form.**

**Interventional Radiology:  
01273 696955 Ext. 4240/4278**

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### Disclaimer

The information in this leaflet is for guidance purposes only and is in no way intended to replace professional clinical advice by a qualified practitioner.

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