

# Adrenal Vein Sampling

## Radiology Department



[Patient information leaflet](#)

This leaflet informs you about the procedure known as adrenal vein sampling. It explains what is involved and the possible risks.

**The benefits and risks of this procedure should already have been explained to you by your doctor. If you have any concerns about the procedure, you should discuss these with your consultant prior to being admitted. You will have an opportunity to ask the radiologist any other questions you may have. Please make sure you do this before you sign the consent form.**

## **The Radiology Department**

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The radiology department may also be called the x-ray department or diagnostic imaging department. It is the facility in the hospital where radiological examinations of patients are carried out, using a range of equipment.

## **Who does what?**

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**Radiologists** are specialist doctors trained to interpret x-rays and carry out more complex examinations.

They are supported by **specialist radiographers**, who are highly trained to carry out x-rays and other imaging procedures.

**Radiology nurses** are specialist nurses who will assist the radiologist and care for you throughout the procedure until you are handed back to the ward nurses, who will collect you from the Interventional Suite where this procedure is carried out.

Prior to this procedure being performed, the radiologist will explain fully what is involved and you will have the opportunity to ask any questions you have regarding the procedure.

A written consent will be required. (You should have sufficient explanation before you sign the consent form).

## What is Adrenal Vein Sampling?

Adrenal vein sampling is a procedure where blood samples are taken from both adrenal glands to compare the amount of hormone produced by each gland. The samples are taken by placing a catheter (a fine plastic tube) into the vein in your groin. X-ray dye (contrast) is injected to show a map of your vessels so the adrenal veins can be located for the samples to be taken. The results of the samples will provide valuable information for the treatment of your condition.

## Who has made the decision that I need this procedure?

The consultant in charge of your case, and the radiologist doing the adrenal vein sampling will have discussed the situation, and feel that this is the best treatment option. However, you will also have the opportunity for your opinion to be considered, and if, after discussion with your doctors you do not want the procedure carried out, you can decide against it.

## How do I prepare for adrenal vein sampling?

You will be admitted to a ward before the procedure.

We will notify you which ward and at what time to come into the ward.

Please do not eat for four hours before the examination; you may drink water up to two hours before the test.

If you are taking any tablets or other medication please take them at the usual time.

It is usual to test your blood for clotting time, to check that you do not have an increased risk of bleeding.

If you are taking Warfarin, Aspirin or Clopidogrel, or if you have previously reacted to intravenous contrast medium (x-ray dye) please phone us before your appointment.

If you have any other allergies please tell the doctor.

**Ladies** – if you are pregnant or think you may be pregnant please phone us before your appointment. We may need to change or cancel your appointment.

## **Can I bring a relative or friend?**

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Yes, but for safety reasons, they will not be able to accompany you into the x-ray room, except in very special circumstances.

You will need someone to collect you and drive you home after your required amount of bed rest, and someone to stay with you overnight.

## **What actually happens during adrenal vein sampling?**

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You will be transported to the department on a bed.

For the examination you will lie flat on your back on an x-ray couch.

During the procedure we will monitor your blood pressure, ECG (heart tracing) and pulse.

The most common approach is the femoral vein at the top of your leg. We may need to shave a small area around it. This gives us access to most other vessels.

The doctor and a radiology nurse will prepare and put on a sterile gown and gloves. There will be other staff in the room to look after you and to operate the x-ray equipment. The skin around your groin will be cleaned with antiseptic fluid and your body covered with sterile towels.

The skin and deeper tissue over the vein will be numbed with local anaesthetic. Following this the catheter will be placed into the vein. Once the catheter is in the vessel you should not feel it move in your body. You will have an x-ray camera over your body with which the doctor can follow the position of the catheter. The catheter will be guided to the adrenal glands under x-ray guidance, and samples taken when in place.

## **Will the procedure be painful?**

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When the local anaesthetic is injected, it will sting to start with, but the area will soon become numb.

## **What about after care?**

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The catheter will be withdrawn and the radiologist will press firmly on the puncture point for five minutes, to allow the vessel to seal and prevent bleeding. After the vein has stabilised, you will be transferred to your ward bed and made comfortable.

You will be asked to stay in your bed on the ward for two hours to allow the puncture site to settle. The ward nurse will check your blood pressure, pulse, and injection site at regular intervals.

Rest when you get home. Do not take up any strenuous tasks for a few days.

If you drive you need to be able to make an emergency stop safely before you return to driving.

## **What are the risks or complications of this procedure?**

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Adrenal vein sampling is considered a low risk examination, although there are some complications that can arise.

You may develop a small bruise around the site where the needle was inserted. This is quite normal.

There is a small risk that the bruise may become very large and uncomfortable forming a haematoma (collection of blood under the skin). Should this happen you may need a small operation to drain the area and you may have to have antibiotics to control the risk of infection.

Very rarely, some damage can be caused to the vein by the catheter; this may need to be treated by another radiological procedure or surgery.

Radiation is used during the procedure, but your consultant has decided that the benefits of having the procedure done are greater than any potential risk of exposure to radiation. The radiation dose you receive will be kept as low as possible.

## What are the benefits of the procedure?

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We will be able to get diagnostic information to check the hormone levels from the adrenal glands.

## Is there an alternative procedure?

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No

## Privacy and dignity

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Sometimes tests or procedures, although necessary, can be embarrassing or undignified for patients but we will endeavour to do everything we can to make you as comfortable as possible during your visit to the department.

## Further information

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For further information about Diagnostic Imaging Services at Royal Surrey County Hospital NHS Foundation Trust, please contact:

### **Royal Surrey County Hospital NHS Foundation Trust**

Egerton Road

Park Barn

Guildford

Surrey

GU2 7XX

[www.royalsurrey.nhs.uk](http://www.royalsurrey.nhs.uk)

## Reference source

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- [www.pubs.rsna.org/doi/full/10.1148/rg.25si055514](http://www.pubs.rsna.org/doi/full/10.1148/rg.25si055514)

## Additional information

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- [www.radiopaedia.org/articles/adrenal-vein-sampling](http://www.radiopaedia.org/articles/adrenal-vein-sampling)

## Information on radiation

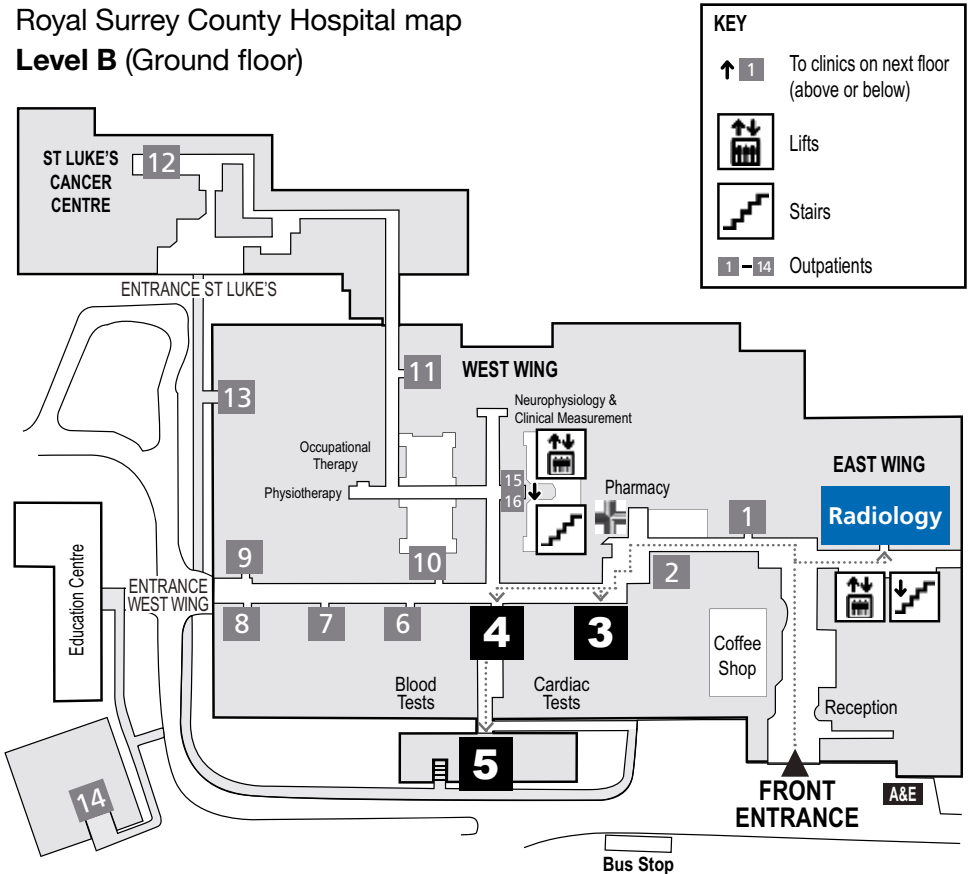
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- [www.gov.uk/government/publications/ionising-radiation-dose-comparisons/ionising-radiation-dose-comparisons](http://www.gov.uk/government/publications/ionising-radiation-dose-comparisons/ionising-radiation-dose-comparisons)

# How to find the Radiology Department

Royal Surrey County Hospital map

**Level B (Ground floor)**



Data sharing reference information is available on Royal Surrey County Hospital patient information leaflet entitled:

Your Healthcare records – your information, PIN120703–562

**Royal Surrey County Hospital NHS Foundation Trust**

Egerton Road

Guildford

Surrey

GU2 7XX

[www.royalsurrey.nhs.uk](http://www.royalsurrey.nhs.uk)

## Radiology Department contact details

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If you have any questions or would like to know more about this procedure, please telephone the Interventional Suite Radiology Department on:

**Telephone:** 01483 571122 **ext** 4596

**If you are unable to keep your appointment, please contact us as soon as possible.**

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## PALS and Advocacy contact details

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Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

**Telephone:** 01483 402757

**Email:** [rsc-tr.pals@nhs.net](mailto:rsc-tr.pals@nhs.net)

**Opening hours:** 9.00am–3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

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Author: Jann Paton

Review author: Jan Mace

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