Intravenous Urography (IVU)
This leaflet provides you with information about an IVU. It explains what the examination will involve and the possible risks.

**What is an IVU?**

This examination is a radiological procedure which uses x-rays to look at the anatomy and function of the urinary system. It is sometimes called an IVP (intravenous pyelogram). The urinary system consists of the kidneys, the bladder, and ureters (tubes which connect the kidneys and the bladder).

During the examination you will be injected with a contrast medium, which is commonly referred to as “x-ray dye”. This is an iodine based dye which is visible on x-rays and helps to provide much more information on the urinary system than a plain x-ray without the dye.

How do I prepare for an IVU?

You may eat and drink as normal prior to having an IVU examination.

If you are diabetic, please make a note of any diabetes medication you take and bring it with you for your appointment.
Prior to the examination it may be necessary for you to have a blood test. (The secretary of the consultant requesting the IVU will contact you if this is the case). Your radiographer will ask you about any existing allergies when you attend for your examination, but if you know you are allergic to iodine please contact the department beforehand. If you are asthmatic, please bring your inhaler or asthma medication with you.

Please note that our x-ray table has a weight limit of 23 stone (150kg). If you weigh more than this it is important that you contact the Radiology department prior to your appointment.

**Women of childbearing age**

This examination is not advisable for pregnant women. If you are unsure whether you may be pregnant, please contact the Radiology department before attending for your appointment. The examination may be rescheduled for safety if there is a possibility of pregnancy.

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

Yes, but for safety reasons you will need to come into the x-ray room on your own.

**Who will I meet?**

**Receptionist/Clerical Staff:** can help you make or change your imaging appointments and ensure your details are correct when you arrive for your appointment.

**Radiographer:** a health care professional who is trained to inject x-ray dye and take images during the examination.

**Radiologist:** a specialist doctor that will interpret the images and report them for your consultant.

**What happens during an IVU?**

You will be given an x-ray gown to change into.

The radiographer will explain the procedure to you, and answer any questions you may have. Your verbal consent will be gained before we commence the examination.
IVU examinations typically take between 45 minutes to an hour and a half. A series of x-rays are taken throughout the examination to image the process at different stages.

The x-ray dye is injected into a vein, usually in the arm, through a cannula (small plastic tube) either by a doctor or trained radiographer. The cannula is removed at the end of the examination. Please tell the radiographer if you are taking blood thinning tablets such as Warfarin or Aspirin.

The first x-ray image is taken before the x-ray dye is injected with you lying on your back on the x-ray table. Once this image has been checked by the radiologist, the cannula will be inserted in your arm and you will be given the injection of the dye.

When the dye is injected, it is common for you to feel a warm sensation - this can vary from gentle and general warmth to a stronger ‘hot flush’ feeling. If you get these sensations they usually fade within a minute or two of the injection. Some people also report a metallic taste in their mouth when they receive the injection, and many people experience the hot sensation in their bladder area. This may feel like you are urinating, but this is just one of the sensations that accompany the dye and will also fade fairly quickly.

Several x-ray images are taken following the injection and each is checked by a radiologist. The examination continues until the doctor is satisfied that we have acquired enough information for an accurate report. You will then be shown to a toilet so that you can empty your bladder and then a final image will be taken to complete the examination.

Once the examination is finished, the radiographer will remove the cannula and will check that you are feeling well before you leave the department.

**Are there any risks or side effects to the examination?**

In rare cases, some people may have an allergic reaction to the x-ray dye. Most reactions are mild; radiographers are trained to recognise the signs of a reaction and to look after you. Doctors are also available should you start to feel more unwell.
A reaction may involve feelings of intense hot flushing, nausea, the development of a rash or wheezing and breathlessness. Severe reactions to the x-ray dye are extremely rare.

As with all radiographic examinations, the amount of exposure to radiation is kept to an absolute minimum.

**Is there an alternative to this procedure?**

A CT scan of the abdomen, also involving the injection of x-ray dye. A CT scan involves a much larger exposure to radiation than this examination. In your case the referring consultant has decided that an IVU is the most appropriate way of assessing/monitoring your problem.

**What about after care?**

There are no after effects to the injection of x-ray dye. After the examination you can eat and drink normally.

**When will I get the results?**

The x-rays we take will be reported on after your visit and the results sent to your referring doctor, which is normally within 14 days. If you already have a clinic appointment you will receive the results then, otherwise you will receive a letter with a date for a clinic appointment.

**Privacy and dignity**

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

We hope that the information in this leaflet will answer any questions you may have, but please feel free to contact us if you have any particular worries, questions or concerns.
Patient surveys

We value your opinion on our service and in order to deliver, maintain and improve this service, we ask you to complete a short patient questionnaire found with your appointment letter. Completion of this survey is entirely voluntary.

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
Guildford
Surrey
GU2 7XX
www.royalsurrey.nhs.uk

Reference source

- Royal College of Radiologists

Useful Websites

- NICE guidelines
  www.nice.org.uk

- For general information about radiology departments visit The Royal College of Radiologists’ website: www.goingfora.com

Information on radiation:

Contact details

If you have any questions or would like to know more about this examination, please contact the Radiology Department on:

**01483 464150**

**Monday to Friday 9 am to 5 pm.**

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

Royal Surrey County Hospital (RSCH) NHS Foundation Trust fully subscribes to the National Patient Safety Agency (NPSA) *Being Open* best practice framework, November 2010.

PALS and Advocacy contact details

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located in far left corner 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

**Opening hours:** 9.00am–4.00pm, Monday to Friday

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

Review date: October 2017

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PIN141024–096

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