



## Angiography (Angiogram)

This brochure tells you about an Angiogram, the benefits and the risks, what happens before, during and after having an Angiogram.

### What is an Angiogram?

An Angiogram uses x-rays and a special dye (contrast) to take pictures of the arteries in your brain, heart, and kidneys.

The dye is injected into a small tube or catheter into an artery in your groin or (sometimes) your arm. The small tube is inserted after an injection of local anaesthetic around the artery. Sometimes intravenous sedation is given. After the dye is injected, pictures are taken using an x-ray machine.

### Benefits associated with an Angiogram

- Used for diagnosis to show **very detailed** pictures of the arteries inside your brain, heart and kidneys.
- Can be used to show blockages in your arteries.

### Risks associated with an Angiogram

Your doctor knows the risks of having an angiogram. Your doctor will consider the risks before recommending you to have an angiogram. Possible risks are:

- Often not recommended in early pregnancy.
- Small amount of radiation. The amount of radiation you are exposed to depends on the number of pictures taken and the part of the body being examined.
- **Extremely small** chance you could develop cancer in the long term from the radiation.
- If you are taking some medications. These include anticoagulants (blood thinning medications) and diabetic medication
- If you have a known kidney disease.
- An allergic reaction from the dye. You may have nausea, sneezing, vomiting, itching, hives and dizziness. More serious reactions can occur, but are very rare.

- Infection, bleeding or injury at the site of an injection.
- Blood clot in the wall of the blood vessel or a weakness of the blood vessel wall that may need treatment.

If you have any allergies, tell the staff or radiology doctor.

If you are at all concerned regarding the risks, talk to your doctor before the examination.

## **Preparation for an Angiogram**

**YOU WILL USUALLY BE ADMITTED TO HOSPITAL AS A DAY PATIENT FOR THIS PROCEDURE.**

- Bring your referral letter or request form and all x-rays taken in the last 2 years with you.
- Leave the x-rays with the radiology staff as the doctor may need to look at them. The radiology staff will tell you when these are ready to be picked up.
- Wear comfortable, loose clothing.
- Leave all jewellery and valuables at home.
- You may be asked not to eat for four hours before the Angiogram.
- You will be allowed to drink clear fluids such as black tea, coffee, clear soup or water during the four hours before the Angiogram. It is important for your kidneys to have fluids.

### **Important to tell your doctor before the scan**

- If you are or may be pregnant
- If you have any allergies and medical conditions, including asthma, diabetes, heart disease, kidney disease or thyroid problems.
- About any medications you are taking.

Just before the Angiogram:

- You may be given a gown to wear.
- You may be asked to remove any metal objects.
- You will need to have a needle put into the back of your hand if you are having sedation during the procedure.

## **Consent**

You have the right to refuse an examination and may do so if you wish. You may be asked to complete a consent form.

## **What happens during an Angiogram**

You will be asked to lie flat on your back on the x-ray bed. Staff will place sterile drapes over you.

- Staff will put a small tube or catheter into an artery in your arm or groin and inject the dye into it.

Possible side effects of 'dye':

- You may feel a slight coolness and a flushing for a few seconds.
- Part of your body may feel warm - if this bothers you, tell the staff.

Once you are ready, the x-ray staff will go behind a screen or into the next room to start the x-ray machine. They will ask you to be still, and may ask you to take a deep breath and hold your breath during the x-rays.

When your x-ray is finished you will be asked to wait while the x-ray staff check the pictures, as you may need another x-ray.

The test including getting you ready usually takes between 30 minutes to one hour.

## **When will I get the results?**

The amount of time it takes for you to get your results will differ depending on where you get your scans done. The radiology doctor will look at the pictures and write a report. The pictures may be on films or on a CD.

Ask whether you should wait to take the pictures and report with you, or whether they will be sent to your doctor.

Your doctor will need to discuss the report with you. You will need to make an appointment to do this.

## **After the procedure**

After the procedure staff will check your groin or arm, and your pulse and blood pressure for 4 to 6 hours. You may need to stay in hospital over night and will usually need to rest for 24 hours before returning to normal activities.

- Staff will need to take out the needle if it is still in your groin or arm.
- Staff will give you any special instructions.
- The dye will pass out of your body in your urine. You will not notice it as it is colourless.
- Drink plenty of fluid to help get rid of the dye.

### **If you had a sedative:**

- **You must not drive a car or take public transport and must have someone with you for 24 hours afterwards.**
- **You must not operate machinery for the rest of the day.**

### **Costs**

The costs of an Angiogram will depend on exactly what is needed and where the procedure is performed. When you ring to book your procedure, you may wish to ask if it will cost you anything. Otherwise, you can ask staff when you go to have your procedure.

### **Further Information**

For more detailed information on Angiography, please see the [Angiography brochure](#) from [Inside Radiology](#), a resource produced especially for consumers by the [Royal Australian and New Zealand College of Radiologists](#).

If you would like to look at other relevant brochures, please see

- [Plain x-ray](#)
- [Radiation risks of x-rays and scans](#)

Or log into the Diagnostic Imaging Pathways website - [www.imagingpathways.health.wa.gov.au/includes/consumer.html](http://www.imagingpathways.health.wa.gov.au/includes/consumer.html)

or

If you have questions or require any further information please contact your doctor or speak to the staff where you are going to have your procedure.

### **Consumer Participation**

This information has been reviewed by representatives from the following groups:

- Aboriginal people
- People with disabilities
- Seniors
- CALD (Culturally and Linguistically Diverse)
- The Health Consumers' Council.

## Feedback

The Division of Imaging Services, Royal Perth Hospital is committed to providing a friendly and professional service. If you would like to provide feedback on this information sheet, please send to:

Quality Coordinator  
Imaging Services  
Royal Perth Hospital  
GPO Box X2213  
Perth WA 6000

## References

- Angiogram, Patient Information Brochure, Imaging Services, Royal Perth Hospital, Perth, WA
- CT Angiography, Radiology Info, [www.radiologyinfo.org](http://www.radiologyinfo.org)

### Website

For more information go to [www.imagingpathways.health.wa.gov.au](http://www.imagingpathways.health.wa.gov.au)

### Copyright

© Copyright 2009, Department of Health Western Australia. All Rights Reserved.

This web site and its content has been prepared by The Department of Health, Western Australia. The information contained on this web site is protected by copyright.

### Legal Notice

Please remember that this leaflet is intended as general information only. It is not definitive and The Department of Health, Western Australia can not accept any legal liability arising from its use. The information is kept as up to date and accurate as possible, but please be warned that it is always subject to change.

