



Renal Artery Angioplasty and Stent

This brochure tells you about the benefits and the risks, what happens before, during and after having a Renal Artery Angioplasty and Stent.

What is a Renal Artery Angioplasty and Stent?

A Renal artery is the main blood vessel to the kidney.

A Renal Artery Angioplasty and Stent is done to treat a narrowed renal artery. Using x-rays as a guide, a small plastic tube is put into the narrowed artery. A special balloon on the tube is blown up to open the narrowed part of the artery. An expandable tube called a stent is then put in to keep the artery open.

Benefits associated with a Renal Artery Angioplasty and Stent

- Used to treat an artery instead of using surgery.

Risks associated with a Renal Artery Angioplasty and Stent

Your doctor knows the risks of a Renal Artery Angioplasty and Stent and will advise you whether the benefits outweigh any possible risk. Possible risks are:

- 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.
- An allergic reaction (usually mild and easily controlled by medication) to x-ray dye.
- Infection at the site of an injection
- Occasionally the procedure does not work or may make the narrowing worse or cause a blockage.
- Occasionally the procedure may cause blockage to other arteries which can cause other problems. Very rarely this can cause death.
- If you are taking some medications. These include anticoagulants (blood thinning medications) and anti-inflammatory medication.

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 a Renal Artery Angioplasty and Stent

- You will need to stay in hospital over night and will need to bring toiletries with you (eg: toothbrush). The hospital you are staying in should let you know if there is anything else you need to bring.
- 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 Renal angioplasty.
- You may be allowed to drink water. You will need to check this.

Important to tell your doctor before the scan

- If you are or may be pregnant
- If you have any allergies and medical conditions. Also, tell them about any medications you are taking.

Just before the Renal Artery Angioplasty and Stent:

- You may be given a gown to wear.
- You may be asked to remove any metal objects.
- You may 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 will be asked to complete a consent form.

What happens during a Renal Artery Angioplasty and Stent

You will be asked to lie flat on your back on the x-ray bed. Staff will clean the skin on your groin or arm and place sterile drapes over you. They will then inject a local anaesthetic, which may sting a little.

A special tube is put into the artery in the groin or arm and passed into the Renal Artery. The dye is injected through the tube. The tube is x-rayed to make sure it is in the right place. The tube is moved into the narrowed part of the artery and another tube is put in which has a tiny balloon on it. This will be inflated to widen the narrowed part of the artery.

A stent is then put in over the balloon. Once the stent is in the right place the balloon is inflated. The balloon tube is then taken out and the stent is left in the Renal Artery. The tiny hole in the artery in your groin or arm will be pressed by one of the staff for about 15 minutes to block 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.

You should not feel any pain, but it may feel uncomfortable in your back when the balloon is blown up.

The Renal Artery Angioplasty including getting you ready takes between one to one and a half hours.

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 procedure 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

You will be taken back to your ward on a trolley and will usually need to stay in hospital over night. The nurse will check your pulse and blood pressure a few times and check your groin or arm in case there is any bleeding.

You may be given aspirin or other blood thinning medication to stop clotting near the stent.

The wound on your groin or artery may be a little sore when you go home. You will be told how to look after this when you go home.

- Staff will need to take out the needle if it is still in your 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 a Renal Artery Angioplasty and Stent 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, please see [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

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

Website

For more information go to www.imagingpathways.health.wa.gov.au

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