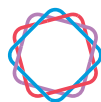




YOUR GUIDE TO

Peripheral Angiogram With or Without Treatment



IntraCare

Interventional
Radiology



IntraCare's interventional radiology suite

Contents

About this procedure	1
Before your procedure	3
Your procedure	4
After your procedure	5
FAQs	7
How to find us	8

About this procedure

This guide provides information about a leg angiogram procedure. It includes details about what is involved, how to prepare and what to expect during and after the procedure. Please use this in addition to information from your doctor and nurse.

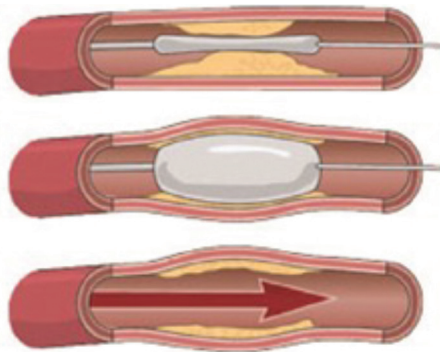
A leg angiogram is performed in an interventional radiology suite at IntraCare Epsom. Your interventional radiologist or vascular surgeon will be assisted by our nurses, and other highly skilled personnel.

Both IntraCare and Allevia Hospital will be involved with your care for this procedure. Allevia Hospital are responsible for your admission, preparation and aftercare in the Cardiac Investigation Unit (CIU).

What is a leg angiogram?

A leg angiogram is an imaging test that uses x-rays and a special dye to see inside the arteries in the leg. The purpose is to diagnose and see any blockages or stenoses (narrowing). This may be performed on one, or both legs.

Once an angiogram has been completed, and a blockage or stenosis has been confirmed, if it is appropriate, treatment can commence. Treatment options include angioplasty, stenting, lithoplasty or atherectomy. Your interventional radiologist will determine which treatment is best suited for you.



Angioplasty

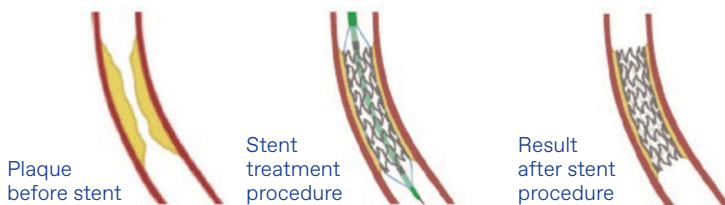
Percutaneous Transluminal Angioplasty (PTA) is the opening of a stenosed (narrowed) or blocked blood vessel using a balloon catheter. The balloon inflates to a specific size, forcing the blood vessel to expand.

In most cases the artery will remain open following the balloon inflation, and, in most instances, a drug coated balloon will then be utilised to help stop the narrowing returning. Sometimes however, the artery does not respond well to a balloon catheter, and in that case, the next step would be to place a stent in the artery.

Stenting

If an angioplasty has been unsuccessful, or a recurrent stenosis persists, a stent will then be inserted so the artery can remain patent.

A stent used in the artery is a metal, mesh like tube made from either nitinol (nickel-titanium alloy) or cobalt chromium. Alternatively, it can be covered with a material, such as polytetrafluoroethylene (ePTFE). Your interventional radiologist or vascular surgeon will decide on the type of stent depending on your specific circumstance, and the location of the blockage.

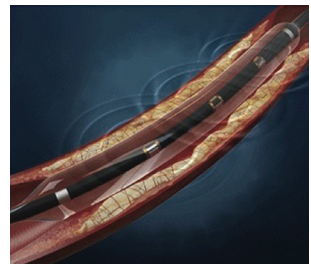


Lithoplasty (Shockwave)

This procedure is performed if there is significant plaque or heavily calcified lesions present in the artery.

It is performed using a balloon catheter, which has lithotripsy emitters (typically ultrasound shock waves) spaced along the shaft.

Once the balloon has been inflated in the calcified section of the artery, pulsatile energy is commenced via these emitters, which breaks up the calcium, subsequently allowing for further dilatation of the artery.



Example of lithoplasty/
shockwave

Atherectomy

Atherectomy is where plaque is removed from the artery. It is performed on arteries with very hard plaque, where angioplasty alone would not be successful. It is also used on those who have had previous angioplasties and stents, but who still have plaque blocking the flow of blood. At IntraCare, atherectomy is generally used in conjunction with drug coated balloons (angioplasty).

Before your procedure

Pre procedure phone call

A nurse from IntraCare will call you 24–48 hours prior to your procedure to discuss the following information:

- Your admission time.
- When you should stop eating and drinking.
- Medication instructions.
- Allergies (including medications, contrast dye, dressings/plasters and food).
- Answer any further questions.

Anticoagulation (blood thinner)

If you are taking any blood thinners (e.g. Warfarin, Clexane, Pradaxa, Rivaroxaban), please make this known to IntraCare staff at the time of booking. Your interventional radiologist or vascular surgeon will advise you if you need to stop this medication temporarily for a few days before the procedure.

Other regular medications

Please continue to take these unless advised otherwise by your interventional radiologist or vascular surgeon. If you are taking a diuretic or water pills (e.g. frusemide, spironolactone), you may need to withhold this on the morning of the procedure.

Reminders for the day of your procedure

- If you are on regular medication, please bring this with you in its original packaging.
- Please leave all your jewellery and valuables at home. You are welcome to bring your mobile phone in with you.
- We recommend wearing loose-fitting clothing and shoes that are easy to slip on/off.
- You are encouraged to bring a friend or a family member as a support person before and after your procedure.
- This is commonly a day stay procedure, but please bring an overnight bag with you in case you are required to stay overnight.
- The planned procedure time is an estimate only and may vary. We will keep you informed of any unexpected delays on the day.

Informed consent

As with any procedure, there are potential risks involved. Your interventional radiologist will explain the procedure, discuss possible risks and answer any questions you may have. Your whānau or support person are welcome to be part of this discussion. You will then be asked to sign the consent form. This will occur either at an earlier appointment, or on the day of your procedure.

Your procedure

A peripheral angiogram with or without treatment is performed under conscious sedation and can take 1–2 hours.

Preparation

You will be collected by an IntraCare nurse from CIU, Allevia hospital to IntraCare for your procedure. An intravenous catheter (IV line) will be inserted into a vein in your arm. Medication will be given to help you relax and keep you comfortable during the procedure. We may need to remove hair with clippers at the access site for sterile preparation. Please avoid shaving the area yourself as this may cause minor abrasions to the skin, increasing the risk of infection.

Other devices for monitoring blood pressure, heart rate and oxygen levels will be fitted to ensure your safety during the procedure.

The procedure

The area around your groin will be painted with an antiseptic solution, and a sterile drape will then be placed over your body, to ensure sterility is maintained. Local anaesthetic will be injected around the artery in your groin. This will sting for approximately 30 seconds. If at any time you feel pain, or discomfort, please inform the doctor immediately, and more pain relief can be given via your IV line, as well as more local anaesthetic.

Using ultrasound guidance, the artery in the groin will be accessed, and a small tube (sheath) will be inserted into the artery. Using contrast dye and fluoroscopy – angiograms will take place.

If the blockage or narrowing can be treated endovascularly (inside the blood vessel), wires and catheters will be used to cross the lesion and treatment will commence. Depending on the location of the lesion you may feel some discomfort during the inflation of balloons or stents. These are momentary and subside once the balloon is deflated. Please inform the doctor if you have pain and it is not going away – more pain relief can be given.

Once treatment of the lesion has been completed, a closure device may be used to close the hole made in your artery. This will mean that you can start to sit up, an hour after your procedure has been completed followed by a number of hours of bedrest.

Types of arterial closure devices

An arterial closure device is used to mechanically seal the artery. There are 3 main types of closure devices used at IntraCare:

- **Mynx** – clotting is achieved by a soft bioabsorbable polyethylene glycol plug sealant. The sealant is dissolved within 30 days.
- **Perclose/Proglides** – a Suture mediated closure system designed to seal and prevent bleeding.
- **Starclose** – a small nitinol clip placed on top of the artery to seal and prevent bleeding.

After your procedure

You will be transferred from IntraCare to CIU, where the Allevia Hospital team will look after you during your recovery. The nurses will monitor your recovery and if appropriate, you will usually be discharged after 4–6 hours, or you may need to stay overnight.

Due to a small puncture being made in the artery, there is a risk of bleeding after the procedure, therefore:

- If a closure device was utilised to close the hole, you will need to remain flat for 1 hour.
- If a closure device was not utilised, and manual pressure was applied to the groin after the sheath was removed, you will need to remain flat for 2 hours.
- You will be on full bed rest for 4 to 6 hours.

Recovery and discharge

- Following your procedure, it is important that you **do not drive for 24 hours**. Please ensure you have a family member or friend to drive you home from the hospital, as you may still be under the effects of sedation.
- You will need to arrange someone to be at home with you on the day of your discharge and overnight to support you in your recovery.

- Due to the sedation, you may feel lethargic afterwards with reduced concentration. For this reason, for 24 hours after your procedure:
 - Do not do any activity requiring strength, concentration, or full alertness.
 - Do not make any legal decisions or sign legal documents.

Resuming activities

- You will be able to return to work within a week of having the procedure unless your job involves heavy lifting (>5kg).
- You can begin light exercise after 1 week.

Medication

Your interventional radiologist/vascular surgeon will give you a prescription for pain relief (analgesic) to take home. Please use this should you experience any dull aching pain for the following few days.

Femoral (groin) site care

It is normal to experience some bruising at the puncture site. During the first few days after your procedure:

- Do not do any heavy lifting (>5kg) or strenuous exercise.
- Try not to excessively cough, sneeze, or strain as this puts pressure on the puncture site which may cause it to bleed.
- Do not sit in a bath, hot tub or spa. This reduces the possibility of bleeding or infection.
- Do not cross your legs while sitting.
- You may resume walking if your puncture site is not painful.
- Remove the dressing on your groin once the skin has healed (approximately 3 days).

Haematoma

It is common for a haematoma to develop after this procedure. A haematoma is a collection of blood under the skin that is sometimes painful. A small hard lump (similar in size to a pea) may also be felt under the skin and remain for several weeks:

- If a large lump (haematoma) occurs, lie down, and get another person to press down firmly on the centre of the haematoma for approximately 10 minutes.
- If after releasing pressure, the haematoma reoccurs, keep applying the pressure and go to your local accident and emergency department.

Bleeding

- It is common for there to be a small amount of ooze. If this occurs, re-apply a sticking plaster and lightly press for a few minutes.
- If there is significant bleeding, you should lie flat, and another person will need to apply firm pressure for 10 minutes. If this does not stop the bleeding, call an ambulance.

Seek immediate medical attention (dial 111 for an ambulance) if there is excessive bleeding from the puncture site.

Please take this booklet and your discharge summary with you if visiting the GP, afterhours or hospital.

**If you have any concerns after your procedure, please contact IntraCare:
Monday to Friday: 09 630 1961 (between 6:30am and 6:00pm).
For after-hours, weekends, and public holidays, contact 027 482 0763.**

FAQs

Who do I contact if I have concerns following the procedure?

If you have concerns in the first few days, contact your interventional radiologist, vascular surgeon, or a nurse at IntraCare.

What is a drug coated balloon?

A drug coated balloon is an angioplasty balloon, which is coated in an antiproliferative drug. Once the balloon has expanded to the size required, the drug is then transferred from the balloon to the arterial wall. It is here, where the drug takes effect. It stops cell division, which in turn prevents the artery narrowing or becoming blocked again

Is this procedure covered by health insurance?

If you have private health insurance please contact our administration team. IntraCare is affiliated with Southern Cross, NIB and AIA and will help you with the approval process and will discuss options for self-funding. Please contact the administration team on (09) 630 1961.

How to find us

IntraCare Epsom

Both IntraCare and Allevia Hospital will be involved with your care for this procedure.

When you arrive, please report to the Allevia Hospital reception desk (number 1 on the map).

First Floor, Allevia Hospital Reception
98 Mountain Rd, Epsom, Auckland 1023

P: +64 9 630 1961 (Monday to Friday 6:30am–6:00pm)

P: +64 27 482 0763 (after hours, weekends and public holidays)

E: admin@intracare.co.nz

W: intracare.co.nz

Where to park

A 10 minute patient 'drop off zone' is available on the level 1 carpark. Head up the ramp as you enter into the carpark from the Main Entrance on Mountain Road.

The first 30 minutes are free and apply only once the vehicle licence plate number has been entered into a payment terminal. Patient parking is available on all levels of the car park. Parking limits apply, and parking spaces are marked (P90, P180, and All Day Parking).

The Allevia Hospital parking is managed by a separate company, and a fine may be issued if your vehicle breaches any of the parking terms and conditions.

There is free 120 minute parking available nearby on Mountain Road, Gilgit Road and Almorah Road after 9am.



Main entrance to patient and visitor car park
 ~ 250 spaces

Walkway to main reception
 Pedestrian access to main reception from car park

- | | |
|--|--|
| 1 Allevia Hospital reception and Allevia Radiology 1 reception | 8 Allevia Radiology 2 (CT, ultrasound) |
| 2 Canopy Cancer Care | 9 The Heart Group |
| 3 ARO (Auckland Radiation Oncology) | 10 Allevia Radiology PET-CT Canopy Cancer Care |
| 4 Allevia Café and outdoor dining courtyard | 11 Allevia Specialist Centre |
| 5 Allevia Pharmacy | 12 Allevia Radiology 1 (MRI/X-ray) |
| 6 IntraCare | A B C D E Allevia Specialist Centre entrances |
| 7 Awanui Labs (blood tests) | |



IntraCare

Intra Limited

E: admin@intracare.co.nz

W: intracare.co.nz

P: +64 9 630 1961 (Monday to Friday 6:30am–6:00pm)

P: +64 27 482 0763 (after hours, weekends and public holidays)