

Aortic Aneurysm

Description: An aneurysm is an enlargement of an artery. In this case it is the abdominal aorta that delivers blood form the heart to the abdominal organs and the legs. It is mostly caused by wall degeneration leading to its weakness. As the aneurysm grows the wall could rupture and internal bleeding occurs.



The aneurysm mostly occurs in elderly men with risk factors like hypertension and high cholesterol as well as smoking.

Aneurysms can run in families therefore it is advisable to get your offspring to get checked with ultrasound scan at the age of 50.

Most aneurysms are stable with increasing risk of rupture at more than 5.5 cm in maximum diameter



For more information, please refer to

https://www.vascularweb.org/vascularhealth/Pages/abdominal-aorticaneurysm.aspx

Treatment: there are 2 methods of treating the aneurysm usually when its size warrants repair or if it causes pain.

1. **Open repair** of the aneurysm by making a long cut in the abdomen, open the aneurysm and attach a synthetic tube graft to either end. That will exclude the blood stream from the aneurysm as it passes through the graft. (see diagram below)



2. **Endovascular repair** where incisions are made in the groin and wires are passed through the aneurysm. A synthetic graft is passed and fixed to the aneurysm wall. That will also exclude the aneurysm from the blood stream. (see diagram below)





Prior to the surgery:

- A full examination will be performed
- Blood tests
- CT scan of the aneurysm to assess its size, anatomy and suitability for endovascular repair.
- Antiplatelet therapy for e.g. Aspirin
- Cholesterol lowering drugs
- Control of high blood pressure and diabetes
- Smoking cessation
- Review by cardiologist to assess the heart
- Consultation with the anaesthetist to confirm fitness for surgery

The surgery:

- Usually admission on the day of surgery or a day before if clinically indicated
- Mostly general anaesthetic (you will be asleep during the operation)
- You will be given antibiotics
- Depending on the method of repair, incisions will be in the abdomen or groins or both.
- An epidural analgesia may be used if open repair



After the surgery:

- You will looked after in high dependency unit or ICU for the first 24 hrs
- You will be allowed to drink some water and later on eat if bowel function is normal.
- Pain relief will be given via the epidural catheter or intravenously
- The recovery time is about 2-3 days for the endovascular procedure and
 5-7 days for the open repair procedure provided no complications or set backs.
- A CT scan might be performed before you leave the hospital
- Early mobilization is encouraged to avoid blood clots and lung infections

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Following discharge:

- Encourage walking at home but no heavy exercise or lifting
- Change dressings if wet and remove after 1 week
- Normal diet
- Review in 6-8 weeks following the surgery
- Might require an ultrasound scan for follow up
- Take regular medications

Risks of the surgery

General:

- 1. Heart attack 5-10%
- 2. Chest infection
- 3. Bleeding requiring transfusion and/or return to theatre
- 4. Wound infection
- 5. Stroke
- 6. Deep vein thrombosis and/or pulmonary embolism
- 7. Bladder infection
- 8. Confusion/delirium
- 9. Impaired kidney function might require dialysis
- 10. Death less than 5% for elective procedures



Specific:

- 1. Bleeding
- 2. Groin complications like bruising, fluid collection, wound breakdown
- 3. Death less than 5%
- 4. Graft occlusion or infection
- 5. Requirement for more endovascular procedures about 10%
- 6. Lack of blood to the legs or kidneys
- 7. Problems with ejaculation in men <10%
- 8. Damage to the arteries with rupture or dissection
- 9. Delay in return of bowel function
- 10. Paraplegia very rare
- 11. Endoleak which is failure of the graft to completely exclude the aneurysm
- 12. Conversion to an open operation
- 13. New aneurysms in the native arteries or from around the suture line
- 14. Post implantation syndrome following and endovascular stent

Warning symptoms and signs:

- Fever
- Rigors
- Unwell
- Severe unusual pain
- Redness or discharge from the wound sites

If you develop any of those symptoms, please call the above number, Call the duty manager of the hospital where you had the procedure, present to the emergency department or see your GP.

For further information, please visit my website www.AdvancedVascular.com.au