

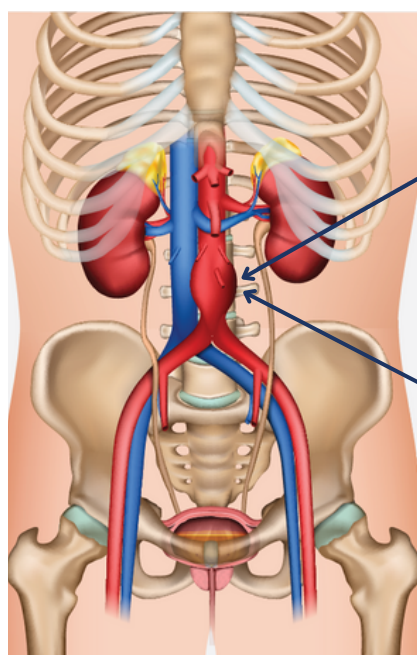
What is an Abdominal Aortic Aneurysm (AAA)?

The aorta is the largest artery in your body. It runs from your heart, down through your chest, and into your abdomen. The abdominal region of the aorta is responsible for delivering blood to your legs, intestines and kidneys.

An abdominal aortic aneurysm (AAA) occurs when the wall of the aorta progressively weakens and begins to bulge. An AAA may continue to enlarge and eventually rupture if left untreated, causing severe internal bleeding and likely death.

Additionally, clots or debris may also develop within an AAA. These substances can be carried to other areas in the body and block circulation, causing severe pain or possibly limb loss if blood flow is cut off for too long.

Abdominal Aneurysm



Blood clots (thrombosis) arise in the aneurysm

The blood flow creates a turbulence in the aneurysm

This leaflet should not replace your discussion with Dr Theivendran. It is solely intended to assist you in understanding abdominal aortic aneurysm.

! Causes & Risk Factors

Most aortic aneurysms are caused by a breakdown in the proteins that provide structural strength to the wall of the aorta. Some risk factors that contribute to this structural breakdown include:



Age: Individuals over 60 years are most likely to develop the condition



Gender: Males are more prone to the condition than females



History of atherosclerosis (hardening of the arteries)



Family history of AAA



Chronic lung disease



High blood pressure



Smoking

Screening & Diagnosis

Most AAAs cause no symptoms and are often found incidentally during an evaluation for another medical condition. Dr Theivendran will take your medical history including family history, followed by a complete vascular examination. Dr Theivendran will also organise an ultrasound test. A vascular ultrasound is painless, safe and routinely used to diagnose and measure the size of an AAA. Dr Theivendran will also screen for aneurysms elsewhere in the body including legs and chest. As there is a genetic association with AAA, Dr Theivendran will also discuss with you the merits of having immediate family members screened. Dr Theivendran may also organise a computed tomographic angiography (CTA). This test will assess aneurysm size, location and the extent of impact. This study requires exposure to radiation and injection of special dye. The CTA provides valuable anatomic information and can help Dr Theivendran determine the optimal type of repair.

Benefits to Treatment

Endovascular Repair	Open Surgical Repair
Mini-invasive	Invasive
Local or general anesthesia	General anesthesia
Lower early complication & mortality rate	Higher early complication & mortality rate
Higher long-term reintervention rate	Lower long-term reintervention rate
Lower blood loss during procedure	Higher blood loss during procedure
No ICU stay (usually)	Stay in ICU
Shorter hospital stay	Longer hospital stay
Follow up x-ray or CT required	Follow up ultrasound required

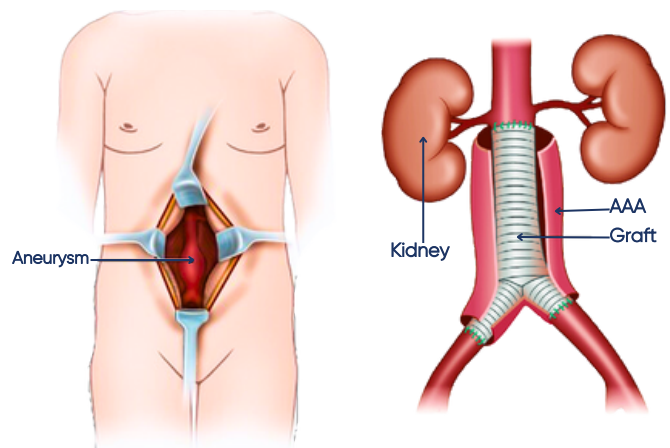
Small vs Large AAA's

Treatment depends on the size of the aneurysm and extent of symptoms.

- **Small AAA's** range from 0 - 5cm in diameter. They have a very low risk of rupturing but should be closely monitored. These usually require an ultrasound scan every 6-12 months.
- **Large AAA's** range from 5cm diameter and above. Large AAA's have a high risk of rupturing. The risk of rupture is greater than the risk of surgery so intervention is required.

Open Surgical Repair

In open surgery, Dr Theivendran repairs the aorta by making a large cut in the abdomen. This treatment option requires placement of a prosthetic graft where the affected portion of the aortic artery is accessed through an inclusion in your abdomen. The graft is sewn into place and acts as a replacement blood vessel.



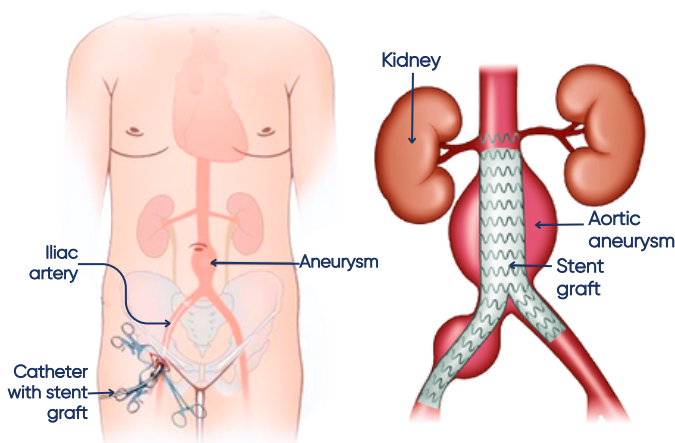
Incision made in the abdomen to repair the AAA

The blood flow through the aorta is stopped while the graft is put in place. It takes roughly 3 to 4 hours to complete. Patients typically spend 1 to 2 days in ICU and usually remain in hospital for at least 7 days. Patients may require 2 to 3 months to recover completely.

Abdominal Aortic Aneurysm

Endovascular Aneurysm Repair (EVAR)

Endovascular aneurysm repair (EVAR) is a less invasive treatment. Treatment here is done through two small groin incisions. Guided by X-ray imaging, a stent is placed into the artery. This stent is a fabric tube supported by a metal framework and is placed inside the aneurysm without surgically opening the tissue surrounding it. The stent is used to reline the diseased artery and exclude the aneurysm. Endovascular repair requires long-term monitoring and occasionally it is necessary to add additional stents in the future to ensure the aneurysm remains sealed. There are other considerations that may be involved in deciding if an aneurysm needs treatment or not. Dr Theivendran will go through all options and tailor an appropriate management plan for you.



Mini-invasive access through patient groin

This procedure is usually performed under local, regional or general anesthesia. It takes about 1 to 3 hours to complete. Patients typically spend a few hours in ICU and usually remain in the hospital for 1 to 2 days. Patients may require 4 to 6 weeks to recover completely.

Post-Procedure

Immediately after recovery from the stent grafting procedure, you may be required to lay flat for 4 to 6 hours. This will allow the leg wounds to start healing. Some mild discomfort may be felt at the wounds in the groin. This usually resolves in 2 days.

Risks for Aortic Repair

<1%



Death

<2%



Cardiac Ischaemia

<2%



Pneumonia

<3%



Lower Limb Ischaemia

<3%



Bowel Ischaemia

<1%



Infection



If you have any questions for Dr Theivendran or our team, please don't hesitate to contact our rooms on (02) 9066 6547

Sydney Locations

North Shore Health Hub

Tower A, Level 2, Suite 205
7 Westbourne St
St Leonards NSW 2065
Provider Number - 252959PB

Northern Beaches Hospital

Level 7, Suite 15
105 Frenchs Forest Rd West
Frenchs Forest NSW 2086
Provider Number - 5316965J

The PARKWAY San Clinic

Level 2, Suite 207
172 Fox Valley Rd
Wahroonga NSW 2076
Provider Number - 5316967H