NHS
Greater Glasgow and Clyde

CLINICAL GUIDELINE

Ultrasound guideline for Abdominal Aortic Aneurysm (AAA)

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

Version Number:	1
Does this version include changes to clinical advice:	N/A
Date Approved:	10th March 2025
Date of Next Review:	31st May 2028
Lead Author:	Karen Thomson
Approval Group:	Imaging Clinical Governance Group

Important Note:

The online version of this document is the only version that is maintained.
Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

Ultrasound Guideline for Abdominal Aortic Aneurysm (AAA)

Examination

Two measurements of the maximum AP diameter of the aorta should be taken in both longitudinal and transverse planes. The measurement should be taken across the lumen from the inner to inner aortic wall. Caution should be taken in the presence of thrombus and only measure from/to the inner aortic wall.

If the aorta is < 3cm then it is normal calibre. State this in the report and no measurement necessary. If ≥ 3.0 cm follow incidental AAA findings below.

"When measuring aortic size with ultrasound, report the inner-to-inner maximum anterior-posterior aortic diameter, in accordance with the NHS AAA screening programme. Clearly document any additional measurements taken."

Recommendations | Abdominal aortic aneurysm: diagnosis and management | Guidance | NICE

Incidental AAA findings (based on inner – inner measurement only):

- Maximum AP diameter **≥ 3.0 cm,** advise vascular referral for follow-up
- Maximum AP diameter **≥ 5.5 cm,** advise **urgen**t outpatient referral to vascular surgery. Ensure copy report reaches referring clinician. Email to GP.
- Maximum AP diameter **≥ 7.5 cm**. **Contact the vascular registrar on call in the Queen Elizabeth University Hospital on 82758 (if internal call) or 07813 456046.**

Reports

Where appropriate, make reference to previous imaging.

Report example for normal findings

The abdominal aorta appears of normal calibre**.** No measurement is necessary in report.

Report example for abnormal findings

The aorta is aneurysmal with a maximum AP diameter of X cm (measured inner to inner).

Please **DO NOT** comment on the presence of thrombus within the aorta. Almost all AAA contain mural thrombus. A comment on its presence can lead to inappropriate prescription of anticoagulation.

If possible, please state position of AAA in relation to renal arteries.

Only comment on morphology if the AAA is saccular or unusual.

Patients with AAA of 5.5 cm - 7.5cm should be advised to present to A/E should they experience acute abdominal/back pain. Those with small AAA should not be given this advice.

It is NOT the role of the sonographer to discuss driving with the patient.

If the patient wishes further information, signpost them to NHS Inform site for AAA screening:

Abdominal aortic aneurysm (AAA) screening | NHS inform

CT/MRI AAA detected follow up

US surveillance for patients who have AAA detected by CT or MRI:

<3cm inner to inner on Ultrasound	Report = normal calibr aorta on US • Vascular referral – state the above • Non vascular referral – state vascular opinion required to discharge from AAA surveillance
≥3cm inner to inner on Ultrasound	Continue surveillance with US measurement

Current Ultrasound AAA surveillance (pre March 2025)

Previous reports should have both measurements, no longer use the outer to outer measurement and continue with the inner to inner measurements. If patients ask about their measurements and why there is a change, reassure them not to worry and ask them to discuss this at their next vascular appointment.