**Reporting tips for aortic aneurysms**

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When issuing an MRI or CT report on a patient with an [aortic aneurysm](https://radiopaedia.org/articles/aortic-aneurysm-1?lang=gb), whether it be [thoracic](https://radiopaedia.org/articles/thoracic-aortic-aneurysm?lang=gb) or [abdominal](https://radiopaedia.org/articles/abdominal-aortic-aneurysm?lang=gb), a number of features should be mentioned to aid the referring clinician in managing the patient.

**Reporting tips for aortic aneurysms** include 1,2:

* size and shape
  + sac dimensions (outer surface to outer surface)
  + luminal diameter if mural thrombus is present
  + length3
  + fusiform or saccular
  + size of vessel proximal and distal to aneurysm
* characteristics of wall
  + mural calcification
  + presence of mural thrombus
* location and relationship to involved branches/structure
  + [renal arteries](https://radiopaedia.org/articles/renal-artery?lang=gb)
    - involvement of the origins of the renal arteries
    - presence of [accessory renal arteries](https://radiopaedia.org/articles/accessory-renal-artery?lang=gb) and where they arise
  + [splanchnic arteries](https://radiopaedia.org/articles/splanchnic-arteries?lang=gb)
  + [great vessels](https://radiopaedia.org/articles/great-vessels?lang=gb) from the arch
* characterisation of possible aetiology
  + true or false
  + possibility of [mycotic aetiology](https://radiopaedia.org/articles/mycotic-aneurysm?lang=gb)
* complications
  + leak
  + [rupture](https://radiopaedia.org/articles/abdominal-aortic-aneurysm-rupture-2?lang=gb)
  + proximity to bowel
  + [aortocaval fistula](https://radiopaedia.org/articles/aortocaval-fistula-2?lang=gb)
* other relevant vessels
  + [thoracic aortic aneurysms](https://radiopaedia.org/articles/thoracic-aortic-aneurysm?lang=gb)
    - the size and dominance of [vertebral arteries](https://radiopaedia.org/articles/vertebral-artery?lang=gb) should be included if the aneurysm is close to the [left subclavian artery](https://radiopaedia.org/articles/subclavian-artery?lang=gb)
    - presence of carotid disease is important, as [significant stenosis](https://radiopaedia.org/articles/carotid-artery-stenosis?lang=gb) may predispose the patient to [strokes](https://radiopaedia.org/articles/ischaemic-stroke?lang=gb) during any period of reduced flow/[hypotension](https://radiopaedia.org/articles/systemic-hypotension?lang=gb)
  + [AAA](https://radiopaedia.org/articles/abdominal-aortic-aneurysm?lang=gb)
    - [renal veins](https://radiopaedia.org/articles/renal-vein-1?lang=gb) - preoperative knowledge of the presence of variant anatomy is essential e.g. [retroaortic](https://radiopaedia.org/articles/retroaortic-left-renal-vein-1?lang=gb) or [circumaortic](https://radiopaedia.org/articles/circumaortic-left-renal-vein-1?lang=gb) left renal veins
  + access vessels for [endovascular repair (EVAR)](https://radiopaedia.org/articles/endovascular-aneurysm-repair?lang=gb) which usually requires bilateral [common femoral artery (CFA)](https://radiopaedia.org/articles/femoral-artery?lang=gb) punctures and vessel diameters of 6 mm or greater

**Example report**

The infrarenal aorta demonstrates a fusiform aneurysm which measures 6 x 7 cm (AP x LR) and extends over a distance of 7.5 cm. It begins 2.3 cm distal to the renal arteries (aorta at this level measures 2.1 cm) and terminates at the aortic bifurcation without extension into the iliac arteries (right CIA = 1.2 cm, left CIA = 1.1 cm).

Smooth eccentric mural thrombus is present within the aneurysm, thickest on the right where it measures 1.5 cm.  The lumen has a diameter of 4.5 x 6 cm (AP x LR). There is no surrounding stranding or extravasation of contrast to suggest impending rupture.

The aorta and other visualised vessels demonstrate widespread atherosclerosis, suggesting that this is the underlying aetiology of the AAA. Moderate (<50%) stenosis is seen at the origin of the right renal artery and coeliac trunk.

The common femoral arteries bilaterally demonstrate calcific atherosclerosis but no stenosis. High-grade stenosis is however present in the right external iliac artery, potentially posing problems for endovascular access on this side.