

ABDOMINAL AORTA SONOGRAM

Recommended transducer:

GE 700: 3.5 or 5 MHz curved linear probe.

Acuson Sequoia: 4C I

GE Logiq 9: 3.5 curved linear

Images:

In gray scale:

Sagittal	Proximal aorta with AP measurement. Mid aorta with AP measurement. Distal aorta with AP measurement. Right and left common iliac artery with AP measurement (to image the longest segment possible, scan the left artery in the left oblique plane).
Transverse	Proximal aorta. Mid aorta. Distal aorta. Aortic bifurcation.

If an aneurysm is present:

- Measure the largest cross section (outer to outer) and the length of the aneurysm.
- Document relation to the main renal, superior mesenteric and celiac arteries.
- Evaluate the aneurysm with color Doppler, both in sagittal and transverse planes, to detect the presence of a hypoechoic clot.

For evaluation of lower extremity ischemia (pain, absent/decrease pulse, "blue toe" etc):

Evaluate the entire aorta and the visualized iliac arteries with color Doppler in addition to the gray scale images, even if no aneurysm is detected.

Notes:

The mid and lower segments of the abdominal aorta are often obscured by bowel gas. Especially in thin patients, bowel loops can sometimes be pushed aside with compression (use a curved linear probe). A coronal plane of the aorta, in the RLD position, can also be useful in this situation. The aortic bifurcation is best demonstrated on this view.