

AUSTIN RADIOLOGICAL ASSOCIATION

ULTRASOUND PROTOCOLS

Procedure Name: Ultrasound Screening for AAA

Updated 01/30/2012, approved 9/2011

Indications:

May include but not limited to abdominal and/or lower back pain, palpable pulsatile abdominal mass, known extremity aneurismal disease, follow up to prior exam, or any other valid medical reason. There are no absolute contraindications.

General Description:

This is a survey abdominal aorta and common iliac arteries at the bifurcation. Color Doppler imaging and/or spectral Doppler imaging with waveform analysis, as indicated.

Patient Preparation:

NPO after midnight for morning exam. For afternoon exam, the patient may have a low fat breakfast with no dairy products, prior to 7:30a.m.

Equipment Selection and Settings:

Select ABD from preset menu

A curvilinear 4.0MHz or other deep imaging probe will be used for most patients. The sonographer should use the preprogrammed setting for the appropriate body part and adjust gain, depth and transmit zone settings to optimize images. Fill out any applicable impression or worksheet upon completion of exam.

Imaging Sequence:

The following imaging sequence is for a normal exam. Include additional images of pathology to demonstrate dimensions in three planes, texture, size, shape, and relationship to adjacent anatomy. Utilize color flow to aid in the determination of any abnormality and to demonstrate blood flow.

1. Image patient data.

Longitudinal images

2. Proximal (near diaphragm)
3. Mid
4. Distal
5. Common iliacs

Transverse images with measurements in AP and transverse

6. Proximal
7. Mid
8. Distal
9. Bifurcation (additional images can be obtained in long)

If an aneurysm is seen, the maximal AP diameter should be recorded. The relationship of the dilated segment to the renal arteries also should be determined if possible. All measurements are to be made from outer wall to outer wall perpendicular to the long axis of the aorta. Document mural thrombus if present. Do not measure true lumen.