

ULTRASOUND PROTOCOLS



Renal Doppler Ultrasound

Indication	Renal artery stenosis, uncontrolled HTN, Malignant HTN
Prep	Patient Supine
Special Instruction	Use the highest frequency curvilinear transducer; obtain 2D gray scale and Doppler images.
Procedure	<ul style="list-style-type: none"> • Obtain routine sagittal and transverse images of the kidneys including appropriate measurements. Obtain routine images of the urinary bladder and volume calculation if possible. • Document any renal abnormality/pathology seen with appropriate measurements and color flow analysis. <p>Renal Doppler interrogation requires color and spectral analysis of the following renal vessels</p> <ul style="list-style-type: none"> • Main RA from Ao origin to renal hilum <ul style="list-style-type: none"> ○ Proximal at RA origin from Ao ○ Mid portion ○ Distal ○ Renal hilum • Segmental arteries • Interlobar arteries • Arcuate arteries • Intracortical vessels -if possible <p>**Angle correction to $\leq 60^\circ$ is required for all vessels except for arcuate and cortical vessels</p> <p>Aorta - spectral trace of the mid aorta proximal to the renal arteries is required for ratio calculation. This should also be obtained with the appropriate Doppler Technique.</p>