# Renal

**Imaging Protocol:** Although only specific images are documented, the kidneys and urinary tract are to be scanned in detail. The following images will represent the normal renal ultrasound exam, but additional images may be necessary for appropriate documentation.

### 1. Longitudinal Right Kidney

Mid with & without measurement (max length and cortex) Mid with color Lateral Medial Liver/Right Kidney

## 2. Transverse Right Kidney

Upper Mid (include renal pelvis) Lower

### 3. Longitudinal Left Kidney

Mid with & without measurement (max length and cortex) Mid with color Lateral Medial Spleen/Left Kidney

### 4. Transverse Left Kidney

Upper Mid (include renal pelvis) Lower

#### 5. Long Distal Aorta

With & without AP measurement

### 6. Bladder

Long Trans

### **Additional Information:**

- Post void residual bladder volume is measured on all male patients over 40 years of age, on pediatric patients, when possible, on any patient with voiding symptoms, and on any other patient as requested.
- If hydronephrosis is found, have patient empty bladder, and reimage kidney to look for change in size of renal pelvis/hydro
- If solid renal mass is found, please document renal vein for patency
- Indications for color doppler evaluation of the renal parenchyma: abnormal parenchyma, a history of pyelonephritis, UTI or glomerulonephritis, and when checking for renal vein thrombosis.

<u>Scheduling & Prep:</u> 30-minute time slot. Drink one to two glasses of a non-carbonated beverage an hour before the test.

Equipment: Ultrasound unit with 3.5 MHz transducer. It may be necessary to have a unit with 2.5 or 5.0 MHz transducers.

Order & Procedure Code: US Renal IMG11536

Additional Information:

Kidneys – The kidneys are evaluated in long axis visualizing the cortex and renal pelvis. The maximum length of each kidney is recorded. Transverse views of each kidney include the upper pole, the mid section including the renal pelvis, and the lower pole. The perirenal regions are evaluated for possible abnormalities. At times it may be necessary to evaluate the renal arteries and veins for patency.

Urinary Bladder – The urinary bladder wall thickness is evaluated. The lumen is evaluated for any masses or lesions. The distal ureters are evaluated for possible dilatation or other abnormality. When necessary post-void bladder residual volume is documented in long axis and transverse views

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