

Dear Colleagues,

The Radiology Ultrasound Team at UTHSCSA, MARC & RB Green Center is pleased offer pertinent Doppler & ultrasound services. These diagnostic studies will add valuable information when managing your patients' care:

1. **Renal Doppler**
2. **Liver Doppler**

### RENAL DOPPLER INDICATIONS

1. **Hypertension**, particularly when there is a moderate to high suspicion of renovascular hypertension
  - Uncontrolled hypertension despite optimal therapy
  - Hypertension with progressive decline in renal function
  - Progressive decline in renal function associated with ACE inhibition therapy
  - Abrupt onset of hypertension
2. Follow-up of patients with known **renovascular disease** who have undergone:
  - **Renal artery stents placement**
  - **Renal artery intervention**
  - Or known **unilateral stenosis** concerning for stenosis in contralateral kidney
3. Suspected **vascular abnormality**
  - Aneurysm
  - Pseudoaneurysm
  - Arteriovenous malformation
  - Arteriovenous fistula
4. **Renal insufficiency** in patients at risk for renovascular disease
5. Evaluation of **renal artery blood flow** in patients with
  - Known **aortic dissection**
  - **Trauma**
  - Other **abnormalities** that may compromise blood flow to the kidneys
6. Evaluation of **discrepant renal size**
7. Concern for **thrombus at aortic or renal artery orifice** in infants who have or have had an aortic catheter, e.g., umbilical artery catheter
8. **Abdominal or flank bruit**

### LIVER DOPPLER INDICATIONS

- Cirrhosis
- Portal hypertension
- Portal vein thrombosis
- Hepatic arterial aneurysms
- Hepatic artery stenosis
- AV fistulas in liver
- Hepatic veins thrombosis or IVC thrombosis (Budd-Chiari syndrome)
- Esophageal varices & Portosystemic collaterals
- Abnormal liver function tests from suspected underlying vascular abnormalities
- Vascular abnormalities causing liver disease
- Splenomegaly

**Contraindications:** No absolute contraindications