# Procedure Name: AV Fistula / Graft Doppler

Updated: 12/3/20

#### **Indications:**

May include but not limited to presence of a surgically placed AV fistula/graft, or any other valid medical reason. There are no absolute contraindications.

### **General Description:**

This is a focused assessment of a surgically placed AV fistula/graft to evaluate for appropriate blood flow through the area.

#### **Patient Preparation:**

There is no patient preparation for this exam.

### **Imaging Sequence:**

- Patient data demographics page
- Annotate: "graft" for artificial synthetic grafts surgically implanted; "fistula" for native arterial-venous vessel in arm.
- Annotate the location of the area (by shoulder, elbow or wrist) on the right or left arm/forearm

## **AV Fistula:**

- Transverse gray scale images with diameter and depth measurements at the following sites:
  - 1. Inflow artery
  - 2. Anastamosis
  - 3. Perianastomotic vein
  - 4. Mid vein
  - 5. Cephalad vein
- Long gray scale, color and spectral Doppler images with velocity measurements at the following sites:
  - 1. Inflow artery
  - 2. Anastamosis
  - 3. Perianastomotic vein
  - 4. Mid vein
  - 5. Cephalad vein

#### **AV Graft:**

- Transverse gray scale image with diameter of Inflow Artery
- Long gray scale, color and spectral Doppler images with velocity measurements at the following sites unless otherwise noted:
  - 1. Inflow artery
  - 2. Arterial anastomosis
  - 3. Proximal graft (arterial side)
  - 4. Mid graft
  - 5. Distal graft (venous side)
  - 6. Venous anastomosis (spectral Doppler not required)
  - 7. Outflow vein
  - 8. Axillary or subclavian as appropriate

All waveforms must be angle corrected to 60 degrees or less.

Please note: \*\*\* the evaluation of the anastomotic site is crucial – this is where aneurysms and stenosis can occur\*\*\*

**Additional imaging:** Document in transverse using gray scale (per physician request) any branches coming off the graft or fistula. Mark the patients arm with a sharpie at the site where you see additional vessels branching off the graft or fistula.