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 patient's arm with a sharpie at the site where you see additional vessels branching off the graft or fistula.