“Resuscitation of Dead Grafts”
Delayed Thrombectomy and Secondary AVF

Patient History (10/16/08)
- 10/16/08 –
  - Old Left Forearm AVG placed 12/12/1994. (13 years & 10 months)
  - CRT’s placed 10/11/1995 and recently failed. (13 years)
  - AVG Clotted 2 months into the Transplant. (1 year after Created)
  - No attempts to declot it in the ≈ 13 years.
  - By ultrasound, the Upper Arm Veins were between 1 – 2 mm discontinuously.
  - No suitable Left Forearm Veins.
  - Initial Surgical Evaluation was pending insurance approval.

Goals
- Goals of “Resuscitation of Dead AVGs”:
  1. An AVG that can be used immediately and
  2. Augmentation of the Upper Arm Veins for future Secondary AVF’s.

Initial Thrombectomy
10/16/08

AVG Venous Limb
Successful Treatment of the Chronically Thrombosed Dialysis Access Graft: Resuscitation of Dead Grafts

Dr. G. Beathard

Key Features

- Thrombosis after recovery of renal function
  - Either spontaneous recovery of native function or after a transplant.
- All were Forearm AVG’s
- Recent AVG’s were < 6 months old when thrombosed. (No anatomic lesion)
- No flow therefore no neointimal hyperplasia.
- Not likely to have much thrombus.
- Once “resuscitated” – acted like any other AVG’s.
- Failures were due to inability to pass the wire through the AVG Venous Anastomosis.

Technique

- Use Ultrasound to decide where to access the AVG.
- Access above the AVG Apex on the venous side.
- 18 gauge needle at a very flat angle passed through the AVG anterior and posterior layers.
- Pull back on the needle until a “slight pop” is felt indicating that the needle is in the AVG Lumen.
- The sheath dilator is used to separate the anterior and posterior walls apart as the wire is advanced.
- Success is dependent on passing the AVG Venous Anastomosis.
- Passing the wire through the AVG arterial Anastomosis was easier.

Suggestions

- First HD
  - Check Access Flow and Examine every week, look for a trend in order to decide when to bring the patient back.
  - Use 15 gauge needles initially.
- Long procedures: Consider antibiotic - esp. post Failed Tx?
- 6 month cut-off: Beyond = more anatomic abnormalities.

Anatomic Lesions:

1. AVG Venous Anastomosis = Flair Stent Graft (if possible)
2. Multiple Anatomic Problems = Place Secondary AVF ASAP
   (Dr. Vo Nguyen is right – Don’t work on it. “Let the AVG Die.”)
   DnCR = Do Not continue to Resuscitate the Dying AVG.