EXCEL IN STENOSIS SURVEILLANCE

Currently in Network 5, 66% of patients with AV grafts receive stenosis surveillance, falling short of the Network goal of 100%.

How can your facility excel in stenosis surveillance?

K Ensure that you are using the K-DOQI recommended surveillance methods and frequency for all AV grafts.

K Utilize the Fistula First Change Concept 6, listed below, to evaluate all patients with AV grafts for secondary AV fistula placement.

K Review the stenosis surveillance methods to guarantee the accurate reporting of your facility’s practice for stenosis surveillance on the enclosed CPM questionnaire.

Fistula First Change Concept 6
Secondary AVF placement in patients with AV grafts

• Nephrologists evaluate every AV graft patient for possible secondary AV fistula, including mapping as indicated, and document plan in patient’s record.
• Dialysis facility staff and/or rounding nephrologists examine outflow vein of all forearm graft patients (‘sleeves up”) during dialysis treatments (minimum frequency = monthly) to identify patients who may have suitable upper outflow vein for elective secondary AVF conversion in upper arm. Inform nephrologist and surgeon of need to evaluate identified outflow vein for AVF conversion.
• Nephrologist refers to surgeon for evaluation/placement of secondary AVF before failure of AVG.

Addendum: Rather than electively converting well-functioning grafts, Network 5’s Vascular Access Committee believes that this change concept should be considered in grafts that have a history of repeated problems.

See reverse for stenosis surveillance methods

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K-DOQI RECOMMENDED STENOSIS SURVEILLANCE METHODS

Color-Flow Doppler
- Recommended once every three months
- Measures the rate of flow through the AVG utilizing measurement of both velocity and vessel diameter
- Requires special equipment, training and is not often available within the dialysis facility
- Most commonly used in assessing access dysfunction rather than routine screening

Static Venous Pressure Method
- Recommended every two weeks
- Static venous pressure is the natural pressure in the access
- The static venous pressure is measured after running at the prescribed Blood Flow Rate for one (1) hour.
- The bloodlines are clamped between the dialyzer and venous drip chamber. Measurement is obtained after 40 seconds
- Baseline should be obtained during the first use of the AVG
- The threshold for action is based on a ratio of intra-access pressure to mean arterial pressure or a persistent trend of increasing pressure readings

Dilution Technique
- Recommended once every three months
- Dilution technique utilizing saline bolus, dyes, thermal dilution, light transmission or ultrasound
- Requires special equipment and training
- Can usually be performed at any time during the dialysis treatment
- Baseline should be obtained during the first use of the AVG
- The threshold for action with AVGS is:
  - Blood Flow < 600 ml/min or
  - Intra-access blood flow < 1000 ml/min that has decreased rapidly or
  - Intra-access blood flow < 1000 ml/min that has decreased by a lesser percentage over a longer period of time (e.g., 25% over a four month period)

http://www.kidney.org/professionals/KDOQI/