

NKF-K/DOQI Vascular Access Clinical Practice Guidelines - 2000 Update

Section IV – Management of Complications: When to Intervene

Note: For the purpose of this Summary Paper, evidence- and opinion-based guideline information related to the arteriovenous fistula will be addressed. For the complete text of the K/DOQI Vascular Access Clinical Practice Guideline Update, please refer to the American Journal of Kidney Diseases, Volume 37, Number 1 (January), pages S141-S149, or visit the National Kidney Foundation K/DOQI Website at <http://www.kidney.org/professionals/kdoqi/index.cfm>.

Abbreviated Introduction:

"Adequate care of an ESRD hemodialysis dependent patient requires constant attention to the need to maintain vascular access patency. An ideal access delivers a flow rate adequate for the dialysis prescription, has a long use-life and has a low rate of complications. Although no current access type fulfills all of these criteria, the native arteriovenous fistula (AVF) comes the closest to doing so. The substitution of synthetic grafts for native AVFs has increased patient care costs in part due to the increased number of procedures needed to maintain patency of grafts compared to AVFs. After evaluating all of the available data on vascular access, the Vascular Access Work Group concluded that quality of life and overall outcomes for hemodialysis patients could be improved significantly by achieving two primary goals: increasing the placement of native AVFs and detecting access dysfunction prior to access thrombosis" (National Kidney Foundation, K/DOQI Clinical Practice Guidelines for Vascular Access, 2000).

Section IV: Management of Complications: When to Intervene (Guidelines 16-18)

Guideline 16: Managing Potential Ischemia in a Limb Bearing an AV Access

- After AV access surgery, all patients should be monitored for development of limb ischemia (Opinion).
- High-risk group (the elderly, those with diabetes and multiple access attempts in an extremity) should be monitored for the first 24 hours post-op (Opinion).
- Patients with an established fistula should be assessed monthly for ischemia (Opinion).
- Refer patients with new findings suggestive of ischemia to a vascular access surgeon emergently (Opinion).

Guideline 17: When to Intervene – Dialysis AV Grafts for Venous Stenosis, Infection, Graft Degeneration and Pseudoaneurysm Formation

- Hemodynamically significant stenosis (Evidence).
- Infection (Evidence).
- Graft degeneration and pseudoaneurysm formation when severe degenerative changes of the graft or overlying skin are present; the skin above the graft is compromised; there is a risk of graft rupture or spontaneous bleeding; limited puncture sites are available (Opinion).

Guideline 18: When to Intervene – Primary AV Fistulae

- For primary AV fistulae appropriate intervention should be initiated upon identification:
 1. Inadequate flow to support the prescribed dialysis blood flow (Evidence/Opinion).
 2. Hemodynamically significant venous stenosis (Evidence).
 3. Aneurysm formation when the skin overlying the fistula is compromised; there is risk of a fistula rupture; available puncture sites are limited (Opinion).