VASCULAR ACCESS

What the Surgeon Needs to Know: New AV access creation and follow-up
Referral Criteria for Surgical Assessment

- Initial ESKD Life-Plan discussed and established
- Referral to Vascular Access Clinic – See Examples
New AV Access Creation & Follow up: Best Practices for Surgeons

Initial Office Visit Checklist

☑ Obtain information to guide vascular access procedure selection
  • Review referral, including ESKD Life-Plan
  • History (include: timing, co-morbidities, body mass index [BMI], patient preference)
  • Physical Examination
  • Vessel mapping to assess arteries and veins of select patients with risk factors (see Table 7.2)

☒ Choose the most appropriate vascular access procedure for that patient based on his/her specific clinical situation
  • Consider using the My Vascular Access mobile app to guide choice (www.myvascularaccess.com)
  • Consider other evaluation tools

☒ Select a primary access that considers secondary access options. The secondary procedure will be included in the patient’s “ESKD Life-Plan” and will be the backup procedure should the primary AV access fail. During follow-up of the primary AV access, the care team will also evaluate the secondary option to decide if it is still appropriate.

CPG 1, 6
CPG 2.4, 7.1-7.5
CPG 1.1
Table 7.2. Examples of Risk Factors For Which Vessel Mapping May Be Beneficial

<table>
<thead>
<tr>
<th>Clinical Problem</th>
<th>Risk Factors</th>
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<tr>
<td>Fistula failure</td>
<td>Elderly age, female, comorbidities (eg, peripheral vascular disease, coronary artery disease), small pediatric patients</td>
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<td>Peripheral vessel damage</td>
<td>Ipsilateral: PICC insertion, other iatrogenic (eg, venipuncture), self-inflicted (eg, IVDU), disease states (eg, vasculitis), radial artery harvesting for CABG</td>
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<td>Central venous stenosis</td>
<td>Multiple CVCs; prolonged CVC duration; cardiac implantable electronic device; PICC; surgery or trauma to neck, chest, upper extremity</td>
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<td>Limitations to physical examination</td>
<td>Morbid obesity, suboptimal conditions (eg, patient dehydrated or vasoconstricted), poor skin integrity, patient refusal</td>
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*Note:* When central venous stenosis is suspected, ultrasound has low sensitivity for detecting central vein stenosis, and venogram should be performed when possible to confirm and locate lesions. Abbreviations: CABG, coronary artery bypass graft; CVC, central venous catheter; IVDU, intravenous drug use; PICC, peripherally inserted catheter central.
Perioperative Evaluation Checklist

- All AV access – identify and manage any infection risks

- For AV Grafts consider oral fish oil supplementation to enhance early AV graft patency
  - provide info on dose (EPA 400 and DHA 200 /capsule; 4 capsules/day)

Postoperative Evaluation Checklist

- Initial 2 weeks – follow-up and assess for complications
  - Infection
  - Persistent pain
  - Limb swelling
  - Nerve dysfunction
  - Symptomatic steal
  - AV access patency

- 4-6 weeks (AV fistula only) – Evaluate AV fistula for maturation
  - If the AV fistula is not matured, develop a follow-up timetable and intervention plan with the goal of achieving a functional access.
  - In considering the intervention plan for the primary AV access, consider impact on secondary AV access options.

CPG 8.1

CPG 14.6

CPG 1.1, 10.1, 15.10
Long-term Follow-up Checklist

Quarterly follow-up of vascular access by care team* – assessment should include acknowledgement, protection, and assessment of the secondary vascular access procedure(s).

Annual follow-up of vascular access by care team

• Assessment should include analysis of continued appropriateness of the secondary (next) vascular access procedure.
• Planning, evaluation and preparation as required.

* Vascular access care team includes but is not limited to the operator/surgeon, nephrologist, patient

CPG 1.1, 1.2
CPG 1.1, 1.3