Management of Clinically Significant AV Graft Lesions
Key Messages

• Confirm clinical indication before proceeding with confirmatory imaging
• Intervene only if both clinical indication is present and lesion is >=50% stenosis
• First line of endovascular therapy in most situations is PTA
• Stent graft may be used in certain circumstances (see Table) but must FIRST ensure that it does not cross cannulation zones and would not impede future vascular access, if it is anticipated per ESKD Life-Plan
Flow Diagram 15.b.

**AVF Stenosis (>50% with clinically significant indication)**

- Central Veins (Axillary vein to SVC; iliac veins to IVC) PTA
  - Success (<30% residual stenosis and resolution of clinical symptoms)
    - 1. Repeat PTA with Ultrahigh pressure balloon (>40 atm)
      2. Prolonged inflation >5 min
    - Failure
  - Failure

- Venous Anastomosis PTA
  - Success (<30% residual stenosis and resolution of clinical symptoms)
    - 1. Repeat PTA with Ultrahigh pressure balloon (>40 atm)
      2. Prolonged inflation >5 min
    - Failure
  - Failure

- Intragraft PTA
  - Success (<30% residual stenosis and resolution of clinical symptoms)
    - 1. No further intervention
    - 2. Stent graft for potential improved primary patency
  - Failure

- Arterial inflow PTA
  - Success (<30% residual stenosis and resolution of clinical symptoms)
    - 1. No further intervention
    - 2. DEB for potentially improved primary patency
  - Failure

- Failure

- 1. Do no more* and monitor
  2. Stent graft for venous occlusion or rupture (not amenable to conservative measures)
  3. Surgical consultation

* Plan and prepare for next vascular access after considering ESKD Life-Plan

1. Do no more* and monitor
   2. Consider surgical consultation

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## Indication for use of stent grafts in AV Grafts*

<table>
<thead>
<tr>
<th>Indication</th>
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<tr>
<td>Clinically significant graft-vein anastomotic stenosis in AVG</td>
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<tr>
<td>Recurrent graft-vein anastomotic thrombosis in AVG</td>
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<tr>
<td>In-stent re-stenosis in AVG</td>
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<td>Treatment of ruptured venous stenotic segment of AVG</td>
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<td>Treatment of highly select AV access aneurysm/pseudoaneurysm</td>
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* Quality evidence for stent graft superiority to POBA for 6 month primary patency only.