COVID-19

An End Stage Renal Disease (ESRD) National Coordinating Center (NCC) Professional Education Webinar

August 5, 2020
Agenda

• What is this call about?
• Today’s speakers:
  ▪ Lynda Ball, MSN, RN, CNN
    Health Services Advisory Group (HSAG) Quality Improvement Director—Network 13
  ▪ Topic: Challenges with Dialysis Access During COVID-19
• Questions and Answers (Q&As) from chat and Q&A panels
What Is This Call About?

- Hear from stakeholders and peers in the ESRD community who are adapting to COVID-19 while engaged with dialysis access tier status.
- Share examples and provide real-world strategies for facilities to use.
Lynda K. Ball, MSN, RN, CNN
HSAG Quality Improvement Director
ESRD Network 13
Disclaimer

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Objectives

- Identify the differences between the dialysis access tier status of essential versus non-essential intervention.
- Describe assessment of a vascular access aneurysm to identify tier status.
- Discuss nursing interventions for a patient with Steal Syndrome.
# Essential vs. Non-Essential Surgery During COVID-19

- On March 18, 2020, CMS recommended suspension of non-essential surgery.¹
- On March 26, 2020, CMS clarified dialysis access is essential surgery.²
- The U.S. College of Surgeons developed its 3-tier, COVID-19: Elective Case Triage Guidelines for Surgical Care (released March 24, 2020).³

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Tier with definition</th>
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<td>Clotted or non-functional dialysis access</td>
<td>3—Do not postpone</td>
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<tr>
<td>Infected dialysis access</td>
<td>3—Do not postpone</td>
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<tr>
<td>Fistula revision for ulceration</td>
<td>3—Do not postpone</td>
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<td>Kidney failure—need dialysis</td>
<td>3—Do not postpone</td>
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<tr>
<td>Tunneled dialysis catheter</td>
<td>3—Do not postpone</td>
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<tr>
<td>AVF revision for malfunction or steal</td>
<td>2b—Postpone, if possible</td>
</tr>
<tr>
<td>Fistulogram for malfunction</td>
<td>2b—Postpone, if possible</td>
</tr>
<tr>
<td>AVF/AVG for ESRD, Stage 4 or 5</td>
<td>2a—Consider postponing</td>
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**Procedure Key:**
- AVF = arteriovenous fistula; AVG = arteriovenous grafts; CMS = Centers for Medicare & Medicaid Services

**Sources:**
Aneurysm Assessment of an Arteriovenous Fistula (AVF)
AVF—Non-essential

What you are assessing for:
- Patency (thrill and bruit)
- Feel of the access (soft vs. firm)
- Skin color
- Cannulation zone for needle placement
- Skin over access (scabs, ulcers, depigmentation)
- Signs of stenosis
- Blood pressure

AVF—Essential

What to be worried about:
• Discoloration of the skin over the aneurysm
• Shininess
• Tightness
• Firmness
• Lack of protection (height)
• Uncontrolled hypertension

Pseudoaneurysm Assessment of an Arteriovenous Graft (AVG)
What you are assessing for:

- Patency (thrill and bruit)
- Feel of the access (soft vs. firm)
- Skin color compared to surrounding tissue
- Cannulation zone for needle placement
- Assess skin over access (scabs, ulcers, depigmentation)
- Leaking or bleeding away from dialysis
- Uncontrolled hypertension
AVG—Essential

• What to be worried about:
• Angry-looking color compared to the surrounding skin
• Shininess
• Tightness
• Firmness
• Ulceration
• Spontaneous bleeding
• Uncontrolled hypertension

Source: Mike Silva, MD. Used with permission.
Infection in an AV Graft—Essential

What to be worried about:

• Redness
• Sloughing of skin
• Leaking
• Uncontrolled hypertension

Assessment for Steal Syndrome
Alteration in Blood Flow due to Access Creation

Normal blood flow to hands

Altered blood flow due to AVF

Source: Robert Inman, RN. & Samuel Inman. Used with permission.
Assessment of Steal Syndrome—Non-essential

What nursing interventions can be implemented?

• Keep the hand dependent.
• Instruct the patient to wear a mitten or tube sock to keep warm.
• Provide a squeeze ball and have patient squeeze during dialysis to increase blood flow.
• Complete the 10-second assessment.

Assessment of Steal Syndrome—Essential

What to be worried about:

- Extreme blanching of the fingers
- Large ulceration on the fingertip due to lack of sufficient blood supply
- Potential necrosis of ulcerated skin

Source: William Jennings, MD. Used with permission.
10-Second Assessment for Steal Syndrome

Assessing for Steal Syndrome

- Pain
- Temperature of Hands
- Color of Nailbeds
- Motor Movement
- Ulcerations
- Necrosis

Source: Ball, LK. Cannulation: A Sticky Situation Workshop. Used with permission.
In Summary
Emergent Referral—Fistula

- Shiny, tight, and pulsatile area
- Diameter increase of greater than three times the original diameter
- Persistent skin breakdown or scab in or around an aneurysm
- Difficulty cannulating because of the size and extent of an aneurysm
- Excessive or prolonged bleeding
- Signs of ischemia distal to an area of enlargement or aneurysmal swelling
- Rapid expansion of the aneurysm

Emergent Referral—AV Graft

- Any lesion with purulent drainage in cannulation zone
- Persistent (greater than 1 dialysis treatment) pain or inflammation
- Persistent scab at previous cannulation site (greater than 3 dialysis treatments)
- Persistent (>1 hour) bleeding from a cannulation site, especially in the presence of increased venous pressure
- Any skin or subcutaneous tissue breakdown where the graft has eroded through
- Pseudoaneurysm greater than twice the original graft diameter
Let Us Hear From You

Q&As from chat and Q&A panels
Introducing TheKidneyHub.org.

- Secure, mobile-friendly web tool for patients and professionals.
- Developed by the ESRD NCC with assistance from patient Subject Matter Experts (SMEs).
- Links to important resources, such as:
  - COVID-19, infection prevention, transplant, home dialysis, and new ESRD patient education.
  - New features include access to the Patient Grant Library, an informative Understanding High-Kidney Donor Profile Index (KDPI) and Increased Risk Kidneys video, and more.
- Visit today and bookmark to your device’s home screen.
Our Next COVID-19 Webinar Events

• Save the dates for our next events.
  ▪ Patient-focused event:
    August 11, 2020, at 4 p.m. ET
  ▪ Provider-focused event:
    August 19, 2020, at 3 p.m. ET

• Visit www.kidneyCOVIDinfocenter.com for information and to register.