The goal of the AV Fistula Clinical Pathway is to standardize the treatment of AV Fistula’s at all OhioHealth facilities to ensure patients are not “under or over” treated based on established guidelines and evidence based scientific publications.

AV Fistula Recommendations

PATIENT PRESENTS FOR DIALYSIS ACCESS

Upper extremity vein mapping

- Presumptive suitable candidate for native AVF (nondominant extremity when choices are equivalent)

Create Native AVF (Order preference: Radiocephalic, Brachioccephalic, BrachioBasilic)

Noninvasive Assessment Recommend:
+ Maturation Study at 6 weeks or as clinically warranted such as prolonged bleeding post cannulation
+ High venous pressures
+ Inadequate flows during HD
+ Arm swelling/pain
+ Inability to access
+ Failure to mature

Remedial Intervention

Mature AVF

RULE OF SIXES:
+ 6 mm Dia
+ ≤6 mm deep
+ 600 cc/min flow
+ AVF scan in 6 weeks
+ AVG scan prior to use
+ Use no sooner than 6 weeks

Candidate clinically unsuitable for AVF and AV Graft placement

Document contraindication in patient chart.

Unsuitable Candidate for Native AVF

Prosthetic Graft

Was the prosthetic graft successful?

YES

Do not place PICC or midline in patients with high risk of needing a fistula.

NO

Evaluate for Secondary AVF Creation

*Vein: ≥2.5 mm at anas site, no obstruction, assessment of central vein stenosis or occlusion.
Artery: ≥2.0 mm at anas site, patent palmar arch, BSP gradient <20 mmHg between arms.
Other testing: Allen test, invasive arterial and venous mapping
OHVI RECOMMENDATIONS | AV FISTULA CLINICAL PATHWAY

WHAT IS A RECOMMENDATION?
A guideline outlining the OhioHealth philosophy for care and/or treatment of a specific patient population.

ACTION REQUIRED:
+ **VI Education Pillar**: Communicate new recommendation at VI meeting.
+ **VI Members**: Communicate new recommendation at campus meetings.
+ **Physicians**: Use as a resource or guideline within your practice.
+ **Nurses**: Utilize as a resource to address patient questions.

WHY?
The goal of the AV Fistula Clinical Pathways is to standardize the treatment of AV Fistula’s at all OhioHealth facilities to ensure patients are not “under or over” treated based on established guidelines and evidence based scientific publications.

WHERE TO DOCUMENT:
Documentation should be maintained in the patient’s medical record.

APPROVED BY:
+ Vascular Institute Executive Committee: 10/6/2021
+ Heart & Vascular Clinical Guidance Committee: 12/14/2021
+ ED Clinical Guidance Committee: 05/21/15
+ Primary Care Clinical Guidance Committee: 06/03/15
+ Critical Care Clinical Guidance Committee: 06/24/15
+ Hospitalist Clinical Guidance Committee: 06/25/15
+ System Clinical Guidance Committee: 6/10/2020

REFERENCES
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+ Fistula First National Vascular Access Improvement Initiative: A Practitioner’s Resource Guide Hemodialysis Arteriovenous Fistulas
+ Increasing AV Fistula Creation: The Akron Experience Nephrology News & Issues: May 2002
+ Prospective Validation of an Algorithm To Maximize native-Arteriovenous Fistulas For Chronic Hemodialysis Access Huber et al Journal of Vascular Surgery September 2002
+ Chapter 4: Vascular Access Jindal et al Journal of the American Society of Nephrology March 2006
+ SVS Guidelines for surgical placement and maintenance of arteriovenous hemodialysis

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