

Interventional Nephrology Approach to AV Access

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Goal

- Seamless dialysis access planning, creation & maintenance
- The multidisciplinary team:
 - Patient/ family
 - Nephrologist
 - Dialysis facility personnel
 - Surgeon
 - Interventionalist



Interventional Nephrologist

- For optimal vascular access three characteristics needed in the provider:
 - Understand dialysis process and dialysis patient
 - ex. typical blood pump speed, standard dialysis needle length, distance between needles to prevent recirculation
 - Possess thorough knowledge of dialysis vascular access
 - Possess skill and expertise in procedures they intend to perform



Dialysis access planning: IN approach

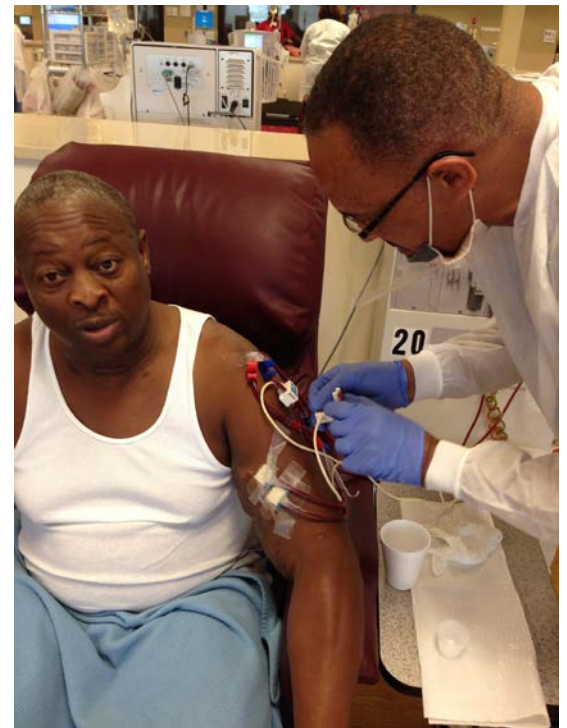
- We provide consultation
 - Patient occupation/hobbies
 - Prior access/PICC/CIED's and surgeries (lymph node resection, etc)
 - Review comorbid conditions, medications
 - Evaluate support system
- Relate radiologic images with other data
 - Dialysis access physical examination
 - Previous vascular access & future options
- Discuss results with patient and referring physician
 - Vessel preservation

First steps toward access placement

- Educate patient/review options
- Individualize based on expected survival/ESRD start
- PD vs HD ?
- Vessel map if indicated
- Make recommendation of experienced surgeon

Who's on the team?

- Referring nephrologist and surgeon
- Nursing team
 - Dialysis vascular access coordinator
 - Dialysis unit vascular access coordinators
- Interventional team
 - IN physician, nurse, technologist



Dialysis access coordinator

- Serves as a single triage point of contact for referring dialysis units and physicians
- Facilitates expedited patient care by helping coordinate the appropriate evaluation and provider



After access placement?

- Examine AV access
 - Outpatient nephrologist
 - Interventionalist
- Encourage early referral for AV access evaluation if not maturing/dysfunctional
 - 6-8 weeks
- Encourage surveillance of the AV access
 - Physical exam



Dialysis Access Interventional Order Form

(Dialysis Units: For URGENT requests, fax completed form AND call)



Phone: (312) 563-3867, Fax: (312) 563-0600 or (312) 563-4976 if URGENT; DialysisAccess@Rush.edu

Rush University Medical Center, 1620 W Harrison St, Chicago IL 60612 (Hospital Tower - 4th Floor)

PATIENT INFORMATION

Today's date: _____

Patient Name: _____ ☐ Male ☐ Female DOB: _____

Phone: (H) _____ (C) _____

Dialysis Clinic: _____ Referring Nephrologist: _____ Phone: _____ Fax: _____

Does the patient speak English? ☐ Yes ☐ No If no, preferred language: _____

Is the patient able to give consent? ☐ Yes ☐ No If not, contact's name and phone number: _____

Does the patient have transportation? ☐ Yes ☐ No If yes, company's name and phone number: _____

Mode of Transportation: ☐ Ambulatory ☐ Stretcher ☐ Walker ☐ Wheelchair

Destination Following Procedure: ☐ Home ☐ Dialysis Clinic ☐ Other _____

IMPORTANT CLINICAL INFORMATION

Access Type: ☐ AVF ☐ AVG ☐ Catheter Date of Creation/Insertion: _____ Surgeon (if known): _____

Dialysis Days: ☐ MWF ☐ TTS 1st 2nd 3rd Shift

Requested Physician to Perform: ☐ Dr. Wasse ☐ Interventional Radiology ☐ First Available

Has This Patient Missed 2 Consecutive HD treatments? ☐ Yes ☐ No Date of Last Full HD Treatment: _____

Check all that apply:

☐ Yes ☐ No Is patient allergic to iodinated contrast dye/X-Ray dye? Describe Reaction: _____

☐ Yes ☐ No Is patient diabetic? _____

☐ Yes ☐ No Does patient require insulin? _____

☐ Yes ☐ No Does patient take any blood thinning agents? _____

☐ Coumadin ☐ Plavix ☐ Lovenox ☐ Pradaxa ☐ Effient ☐ Other: _____

PROCEDURE REQUESTED

ACCESS PROCEDURE

☐ **DECLLOT Fistulogram**

☐ Fistulogram

☐ Clinical Evaluation

CURRENT LOCATION

☐ Right / ☐ Left

☐ Forearm

☐ Upper Arm

☐ Chest

☐ Thigh

INDICATION

☐ **CLOTTED ACCESS**

☐ Decreased Blood Flow

☐ Infiltration

☐ Steal Syndrome

☐ Prolonged Bleeding

☐ Recirculation

☐ High Venous Pressure

☐ Swollen Limb

☐ Difficult Cannulation

☐ Non-Maturing AVF

☐ Blood Flow Monitoring

☐ Aneurysm

CATHETER PROCEDURE

☐ New Tunneled Catheter

☐ Tunneled Catheter

Exchange/Replacement

☐ Tunneled Catheter Removal

CURRENT LOCATION

☐ Right / ☐ Left

☐ Subclavian

☐ Internal Jugular

☐ Groin

☐ Tunneled

☐ Non-Tunneled

INDICATION

☐ **CLOTTED CATHETER**

☐ Broken Catheter

☐ Infection

☐ Poor Blood Flow

☐ No Longer Needed

Physician Signature (Required): _____

Scheduling Priority: ☐ URGENT/TODAY (Patient has life threatening condition/ Patient unable to dialyze)

☐ ROUTINE/ELECTIVE Date Preference: _____

THIS ORDER MUST BE ACCOMPANIED BY H&P DATED WITHIN THE LAST 30 DAYS. PATIENT WILL NOT BE SCHEDULED WITHOUT H&P.

*****The completion of ALL fields is mandatory. We will NOT be able to schedule a procedure without the completion of ALL requested information.**

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Access Maintenance

- In addition to access assessment and performing procedures:
 - Review dialysis prescription (Qb, Qd, VP, AP, needle size)
 - Contact the dialysis unit (cannulation technique, variation in success with various personnel)
 - Consider impact of blood pressure, medications on patency
 - Take into account future access sites
 - Communicate findings directly with dialysis unit, nephrologist, surgeon
 - Make recommendations when its time for new access

Conclusion

- The IN team approach is multidisciplinary
 - Individualize to patient
 - Early planning
 - Effective communication with dialysis unit, referring nephrologist and surgeon
 - Perform procedures, preserve opportunities for future access