

# Role of a Dialysis Access Coordinator (Vascular Access Manager)

Carolyn Barclay, RN, CNN  
Adapted by

9/18/2006

1

## Introduction

- Goal: Help the Dialysis Community see the value a Vascular Access Manager (VAM) can bring as a member of the team.

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2

## Ideal Renal Team

- Renal Pharmacist
- Renal Dietician
- Social Worker
- RN Nephrology Care Managers
- Transplant Coordinator
- Dialysis Access Coordinator/VAM

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3

## It Takes a Team

- Patient/Patient's Family
- Nephrologist (office staff)
- Vascular Surgeon (office staff)
- Interventional Radiology
- Dialysis Staff
- Dialysis Access Coordinator/VAM

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4

## Topics of Discussion

- Role of the Access Coordinator/VAM
- Identifying Pre-ESRD population
- Education key for Early Referral for Dialysis Access
- Saving Veins

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5

## Topics

- Tracking Data
- Access Problems: What to report?
- Education Tools for Patients

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6

## Role of the VAM

- Provides ongoing patient support, oversight and education related to vascular access.
- Facilitates early access placement with emphasis on fistula placement whenever possible.

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7

## Role of the VAM

- Collaborates with dialysis unit staff, hospital staff, surgical staff.
- Maintains Access History
- Participates in QA activities related to Access
- Serves as a resource on Access issues

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8

## Early Referral to Nephrologist

- Primary Care M.D.'s need education
- Goal is for early fistula creation
- We must get patients referred to Nephrologist before they can be referred to surgeon
- Timing of referrals can improve if Primary Care M.D. knows when to refer

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9

## Early Referral to Nephrologist

- Screen patients at high risk:
  - ◆ Age >60,
  - ◆ African-American,
  - ◆ Native American,
  - ◆ Diabetes,
  - ◆ Hypertension
- Refer to nephrologist if stable or rising Creatinine >1.5 female, >2.0 male
- Proteinuria > 2 gm/day

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10

## Glomerular Filtration Rate

- Nephrologist should direct when patient gets referred for dialysis access.
- GFR is widely accepted as the best overall measure of kidney function.
- GFR Calculator is on Nephron.com

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11

## When to Refer for Hemodialysis Access

- When GFR <30 (CKD Stage 4) and patient chooses hemodialysis, nephrologist should refer to surgeon for AV fistula consultation.
- Best for AV fistula to be created 6 months to 1 year prior to dialysis start to allow for maturation time.
- Goal should be to *avoid hemodialysis* catheter whenever possible.
- If patient is not a candidate for an AV fistula, nephrologist may want to wait until GFR lower before graft placement.

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12

## Education of Pre- ESRD Patients

- Education should start when GFR is <30ml/min (CKD Stage 4).
- Modality choices need to be presented before appropriate access referral can be made.
- Consider AV Fistula creation even if patient chooses peritoneal dialysis.
- Educate patients to **"Save Their Veins"**

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13

## AV Fistulas Need to Be Created Early!

Helpful if patient understands process

- Referral to surgeon
- Ultrasound mapping may be necessary before surgery can be scheduled
- Important patient have follow-up post AV fistula creation to monitor development of AV fistula.
- An AV fistula attempted and not successful should not be considered a failure! An AV fistula attempted is better than a graft.

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14

## Provide Realistic Expectations

- Access may take maintenance angiography, angioplasty, thrombectomy, revision.
- Grafts clot much more often than fistulas
- AV Fistulas can be fragile and can infiltrate
- AV Fistulas can clot - and can be successfully de-clotted.

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15

## Referral for Dialysis Access

- Vascular access coordinator can facilitate referral:
  - ◆ Send appropriate patient records, labs, medication lists, allergy list to surgeons office.

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16

## Referral for Access:

- Call patient to let them know they are being referred.
  - ◆ Allow them time to ask questions.
- Follow up: Patients often have difficulty accepting it's time for an access.
- VAM acts as liaison between nephrologist and surgeon's office.

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17

## Best Outcome:

- Patient starts first dialysis treatment with a functioning AV fistula.

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18

## No Access in Place for Dialysis Start - Options

- Tunneled hemo Catheter + AV fistula placed, if possible.
- If patient wants Peritoneal Dialysis an acute hemo catheter + PD Catheter may suffice until PD training can start.

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19

## Next Steps:

- Vein mapping (as necessary)
- Graft material only if patient not a good candidate for AV fistula.
- Nephrologists could consider use of peritoneal dialysis while AV fistula matures if patient is an appropriate candidate for PD
- Case example

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20

## Reporting Access Problems

What's important to report?

- Increase in venous pressure
- Changes in arterial pressure
- Prolonged bleeding
- Decrease in Kt/v and URR
- Change in bruit
- Abnormal transonic/ultrasound flow
- Swelling, redness, pain, problems with cannulation
- Poorly functioning hemodialysis catheter

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21

## Reporting Problems

- Be aware that if patient has significant stenosis - access may function but labs can get critically out of balance.
- Case example:
- Fistula examples
- Catheter example

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22

## Tracking Information

- Access history – very helpful if VAM and/or designated staff person can keep an updated history on all access events a patient is having.
- Patient name
- Date of procedure
- Surgeon/radiologist

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23

## What's Important to Track

- Needs to be decided by team
- Database is useful to track
- Primary Placement
- Replacement Access
- Thrombectomies
- Infections

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24

## What's Important to Track

- Access Incidence and Prevalence
- Angiography/Angioplasty
- Information can be tracked by dialysis unit, surgeon, access type

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25

## VA Pt tracking tool

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26

## PD tracking tool

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27

## Thrombosis by month

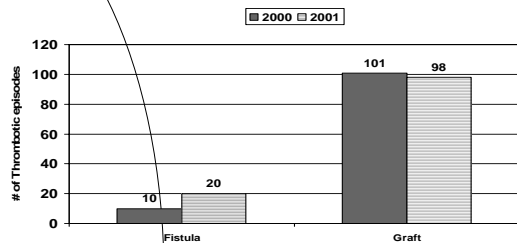
Health Plan Monthly Total	# of Hemo Pts + Pts w/VA	# of Thrombosis	Thrombotic Episodes/Pt/Mo	Annualized Episodes/Pt/Year
Jan	283	14	0.05	0.88
Feb	284	7	0.02	0.44
Mar	288	7	0.02	0.39
April	271	9	0.03	0.39
May	274	14	0.05	0.44
Jun	281	9	0.03	0.43
July	297	10	0.03	0.42
Aug	304	4	0.01	0.39
Sep	306	12	0.04	0.40
Oct	286	11	0.04	0.41
Nov	304	11	0.04	0.41
Dec	308	9	0.03	0.40
Current Total	2588	117	0.05	

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28

## Thrombosis

Thrombotic Episodes - 2000 vs 2001 Summary  
AV Fistula versus Graft

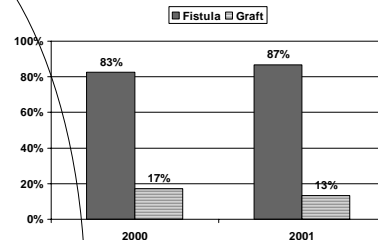


9/18/2006

29

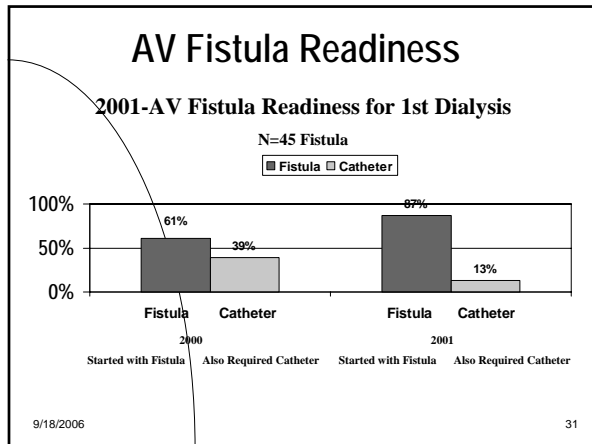
## Primary Access

Primary Insertions by Non-Catheter Access Type: AV Fistula vs Graft for 2001



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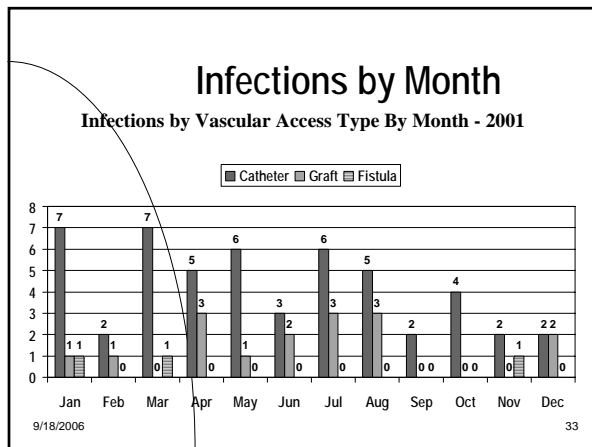
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### Infection Tracking

- Tracking infections by access type
- Systemic (blood) or local infection
- CDC has dialysis surveillance study that individual units can participate in
- <http://www.cdc.gov/ncidod/hip/dialysis/dsn.htm>
- Allows comparison with other participating units in the country

9/18/2006 32



### Tools for Access Management

- Referral to Surgeon form
- Referral for Evaluating Problem
- Infection Tracking
- Access Procedure Tracking Tool
- "Save Your Veins" card
- Wallet card with Access Care Advice and Important Phone Numbers for dialysis unit, surgeon, nephrologist

9/18/2006 34

### Caring for the Hemodialysis Catheter

- Educate patient on:
  - proper handwashing technique
  - taking a shower without getting the catheter wet;
  - changing the dressing on their own
  - clamping the catheter if it starts to bleed
  - what to do if the catheter falls out
  - who to call if they have a problem with the catheter

9/18/2006 35

### Care of the New Dialysis Access AV Fistula/Graft

- Allow enough maturation time ( 2-6 weeks for AVG and 2-3 months for AVF)
- Carefully assess VA before each dialysis session
- Rotate needles
- Clamp use vs. no clamps
- Educate patients on s/s of infection, clotting, and other complications

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## Wallet card

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37

## Long Term Care of the Hemodialysis Access

- Routine monitoring and surveillance at the facility level
- Prompt referral and arly intervention
- Patient VA history
- Patient education
- Self-cannulation

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38

## Conclusion

- Access Manager does play a beneficial role in helping patients, nephrologists, surgeons and dialysis staff in the coordination of access care

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39