



Vascular access for haemodialysis in Scotland



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on behalf of the Scottish Renal Registry

Introduction

- It is widely accepted that a native arteriovenous fistula is the best form of vascular access for haemodialysis
- Central venous lines are associated with a higher risk of bacteraemia and higher mortality¹⁻³

Standards

- Quality Improvement Scotland - Standard 4.4:**

A minimum of 70% of HD patients have an arteriovenous fistula or vein graft as their permanent access

- UK Renal Association Survey 4/2005**

5 of 10 Scottish adult units reached target

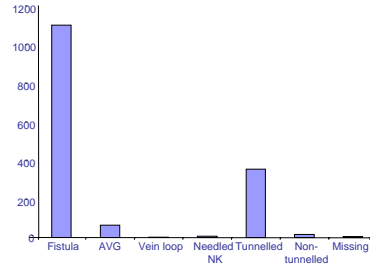
- National Service Framework Standard 3**

Recording and auditing of the type of access and complications rates for each procedure/ type of access

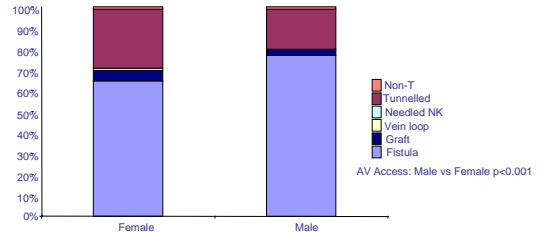
Research Questions

- How may HD patients with ERF have fistulas, grafts, tunnelled lines etc?
- What are the determinants of access type?
 - gender, age, primary renal disease?
- Are there large differences in access type between units?

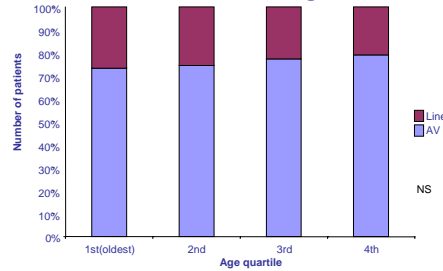
Vascular access by access type



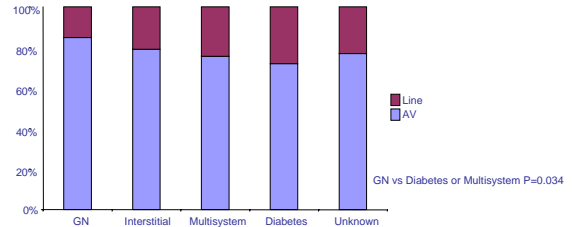
Access in males and females



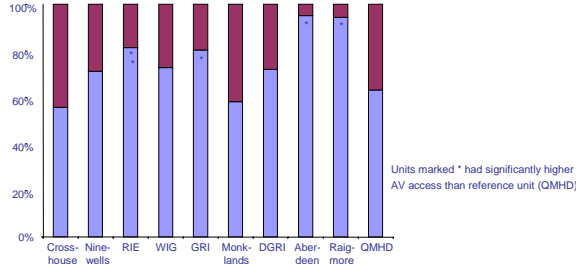
Access and Age



Access and Primary Renal Disease



Access by Renal Unit



Conclusion

- Access is dependent on:
 - Renal Unit
 - Sex
 - Primary Renal Disease
- The number of units reaching targets is improving and is now 70% of adult units

Future Work

- Association with haemoglobin and ESA data.
- Association with URR and dialysis time data.
- Repeated and extended survey 4/2007

Scottish Renal Registry Audit Census Day Confidential Summary and Data Collection Sheet Ver 13 17 Aug 2006

The SRR Steering Group has agreed to combine our regular audits of haemoglobin and URR with the first survey of Vascular Access for patients using hospital or home HD for ERF.

Please complete this form for every patient who dialyses in your unit on the census day. This includes patients who are normally registered with another unit but who are dialysing with you on that day. It also includes all your satellites. An expanded instruction sheet has been sent to each renal unit. A copy can be viewed on the SRR Website. Further copies of this document and the instruction sheet are available on the SRR website <http://www.srr.scot.nhs.uk/SRR/> or you can photocopy a blank form.

Once completed please give this form to the person responsible for entering data onto the Renal Unit Electronic Patient Record or the Scottish Renal Registry. They will deal with data entry and then send the form to the SRR office.

Please complete all 7 Sections of this form.

1. Patient ID

Name of Patient Renal Unit eg Monklands
Location of the HD eg Home or Peterhead...
Patient Name : Surname Forename
Date of Birth (dd/mm/yyyy)

2. HD Details

Date of HD reported for this Census
HD Sessions per week
Please tick the appropriate box
What is the planned Duration of this HD session
What time will (or did) this session start

3. Today's Pre-dialysis Weight and Blood Pressure

Please record the patient's pre-dialysis weight in kg wearing large indoor clothes without shoes.
Please record the patient's pre-dialysis sitting blood pressure

4. Vascular Access

Please tick one box which best describes the afferent (arterial) access used for HD on the Census Day

Fistula:	Right	Left	Vein Loop	Right	Left
Radiosaphalic			Branchial artery to branchial vein		
Brachiocephalic			Branchial artery to basilic vein		
Brachioaxillary			Femoral artery to femoral vein		
Brachiofemoral			Vein Loop, details not known		
Other					
Peritoneal to long saphenous					
AV Fistula, details not known					

5. URR Audit

Please tick the box below to confirm that you have done or will do the routine April URR samples as described in the SRR guidelines on the Census Day and that you will submit the results to the SRR in the normal way for your unit (eg via Electronic Patient Record). You do not have to enter a result here.

UUR Sample taken Yes No

6. Haemoglobin Audit

Please tick 3 boxes below to confirm that you have or will measure the following as described in the SRR guidelines on the Census Day and that you will submit the results here.

Haemoglobin Sample taken Yes No
Serum Ferritin Sample taken Yes No
HFE test performed in blood transfusion in the last 60 days before the Hb audit sample? Yes No

7. Haemopoietic Drugs

Please tick the box below to confirm that you have done or will do the routine April URR samples as described in the SRR guidelines on the Census Day and that you will submit the results to the SRR in the normal way for your unit (eg via Electronic Patient Record). You do not have to enter a result here.

UUR Sample taken Yes No

Drug Name	Dose	Units	Frequency	Route
Eprex/Epo	1000	U	2x weekly	Sub cut
Juvavite/HIFP	0	U		
Coronasep	50	mg	weekly	IV
Coronasep	50	mg	weekly	IV

UUR, Juvavite or Eprex, also Eprex, Eprex Neo/Neosomone
HIFP, Juvavite, Eprex, Eprex Neo/Neosomone
Coronasep
Eprex Neo/Neosomone, Juvavite, Eprex Neo/Neosomone
Eprex Neo/Neosomone, Juvavite, Eprex Neo/Neosomone
Eprex Neo/Neosomone, Juvavite, Eprex Neo/Neosomone
Eprex Neo/Neosomone, Juvavite, Eprex Neo/Neosomone

Please ensure that this form is returned by your local coordinator as soon as possible to the Scottish Renal Registry, Glasgow Royal Infirmary, Watson Building, Glasgow, G4 0SF

Results

- 1550 prevalent patients on 5th April; 58% of these were male
- Primary renal diagnosis available for 1399 patients

References

- 1- Dhingra *et al.*, 2001; *Kidney Int* 60:1443 2- Pastan *et al.*, 2002; *Kidney Int* 62:620 3- Xue *et al.*, 2003; *Am J Kidney Dis* 42:1013