

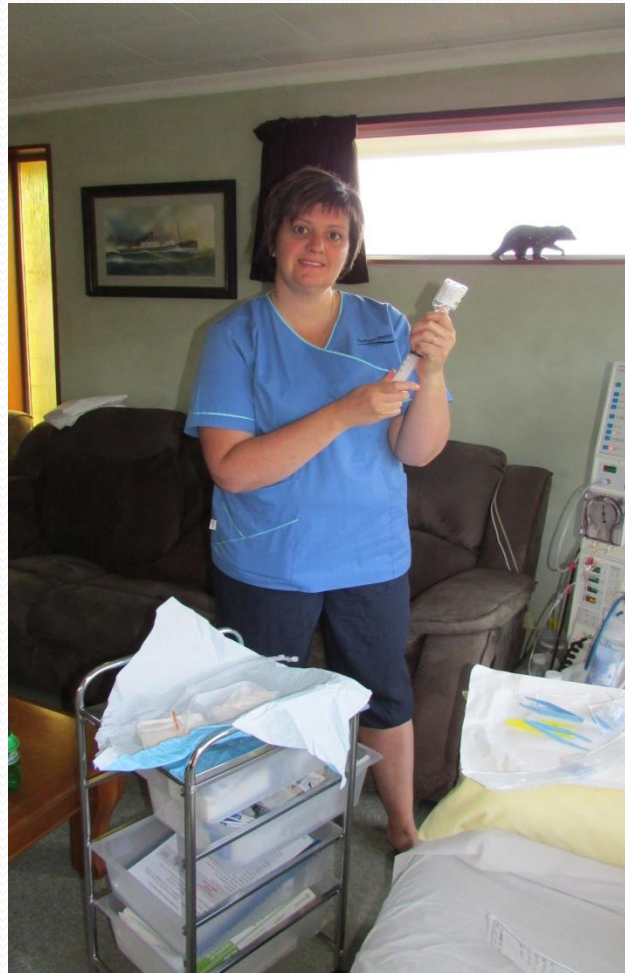
Enrolled Nurse Home Haemodialysis Programme.

**Southern DHB
Dunedin**

What we will cover?

- My Background
- Dunedin Dialysis unit
- EN Training
- Haemodialysis what is it and how it works
- The machine
- Types of vascular access
- A Typical EN day at home
- How we meet competencies

Who am I and where did I come from?



EN HHD Training

- HHD EN training is approx 3 months in unit training.
- EN's are trained by a Registered Nurse (RN) preceptors.
- Training includes: pre treatment assessments, calculate the treatment, prepare the machine, deliver dialysis which includes intravenous medications, post treatment analysis, patient education on diet and fluid management.
- Training is practical in regards to the machine and needling the patients there is a large amount of research/ education to understand why we do what we do. We had a education and competency workbooks.

What is Haemodialysis?

- **Haemodialysis** is a way of cleansing the blood of toxins, extra salts and fluids through a dialysis machine called “artificial kidney”. It helps maintain proper chemical balance such as potassium, sodium and chloride and keeps blood pressure under control

The Dialysis Unit.



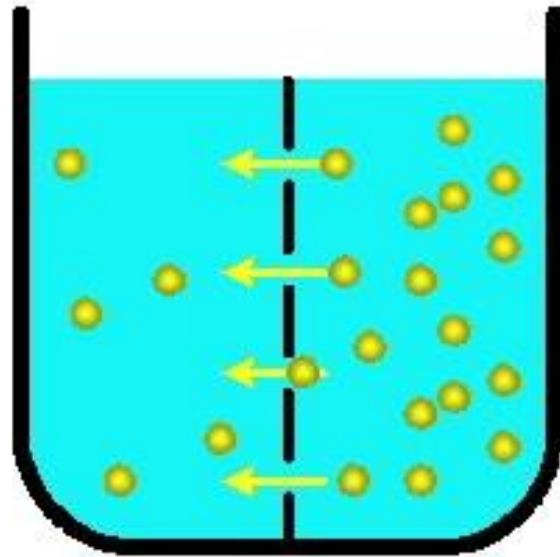
How HHD came to be.

- 2012 external review of the renal service

How it all work

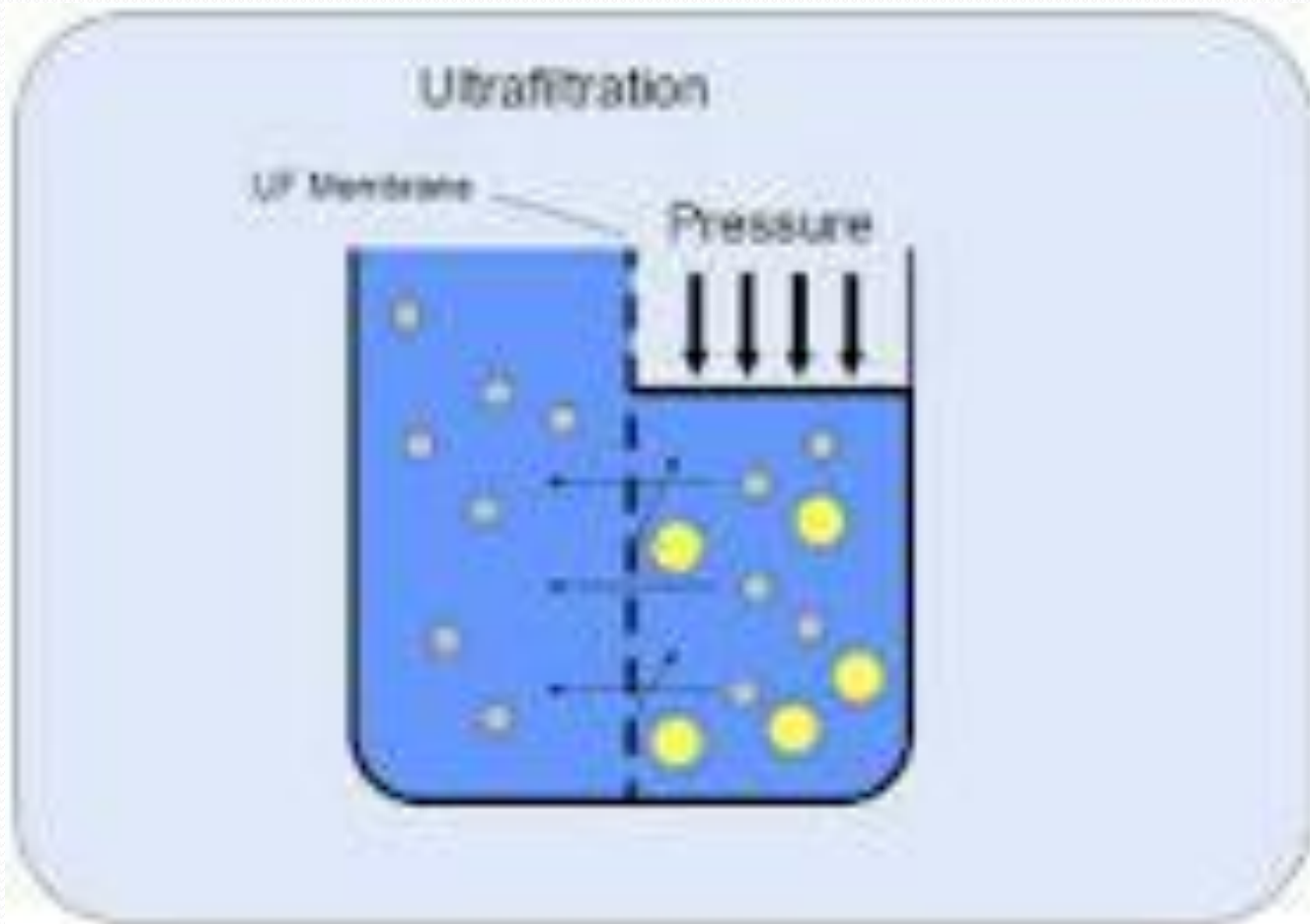
- Diffusion
- Ultra filtration
- Osmosis

Diffusion

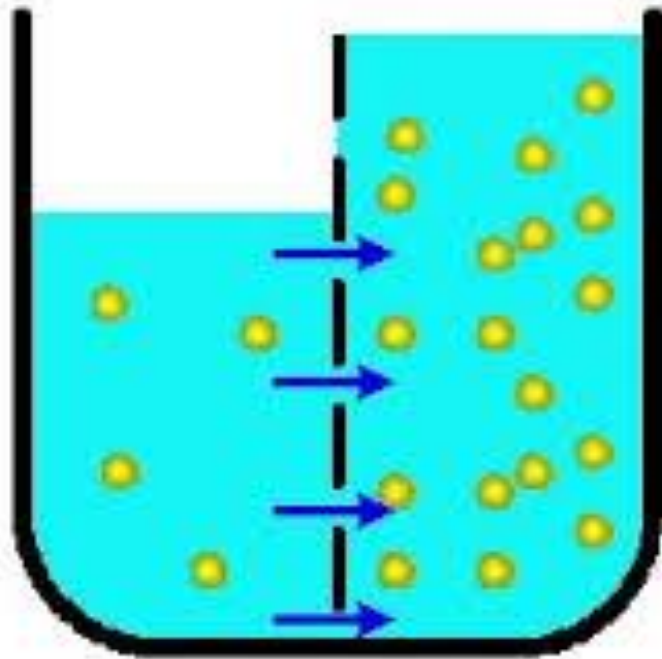


Diffusion
(Solvent moves by
concentration gradient)

Ultrafiltration



Osmosis



Osmosis

(Water moves by
concentration gradient)

The Machine and equipment.

- Fresenius 4008B



Uno



The Circuit



Heparin Pump



Arterial and venous bubble traps.



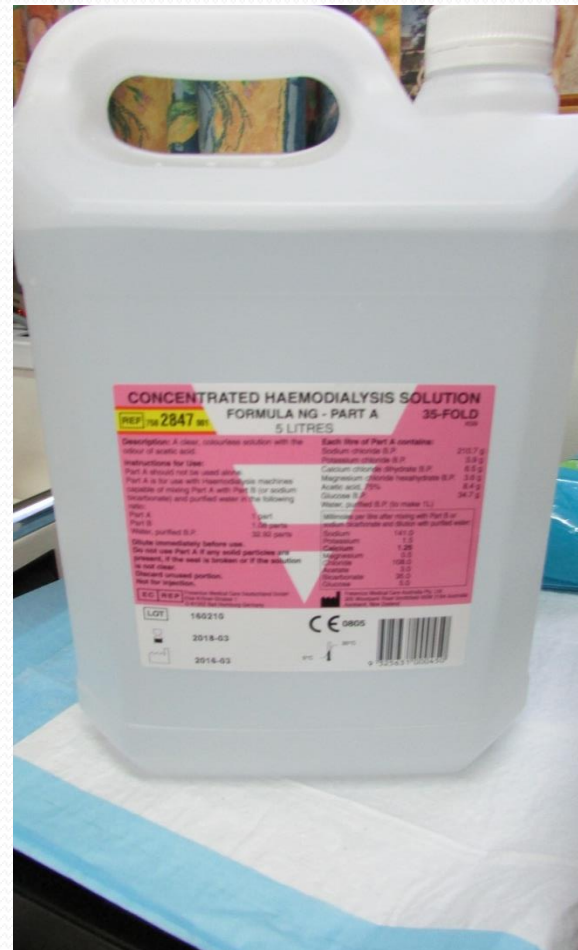
Dialyser/Filter





Concentrate Solution 1.5 or 3.3

PART A



Bi Bag

PART B



How does it work?



Home Haemodiaysis Prescription

Southern District Health Board
Dialysis Unit

Name: _____ NHF No: _____
Address: _____ DOB: _____
Tel: _____
↑ Stick patient label here (or fill in if no label available) ↑

Current Home Dialysis Prescription (Otago) Form creation date: _____

Basic Data	ANZ data registration no:	Diabetes:	HbsAg:	HIV:
	Hospital NHI:	Patient name:		
	Allergy status:	Home address:		Contact phone:
	Birth date:	In emergency notify:		
	Gen. practitioner:	Vascular Access type / location:		
GP phone:				

Day of week	Duration [hr:min]	Comments:
Monday:		
Tuesday:		
Wednesday:		
Thursday:		
Friday:		
Saturday:		
Sunday:		

Products	Machine:	Bloodline:
	Dialyser:	Bicarb / concentrate:
	Needle:	Dialysate:
	HDF:	Pre / post dilution rate:

Device	Use single needle:	Anticoagulant:
	Art. blood flow: _____ mL/min	Heparin bolus: _____ IU
	Dialysate flow: 500 mL/min	Heparin maintenance dose: _____ IU/hr
	Dialysate temp: 36 °C	Stop time: _____ min

UF	Max UF rate: _____ mL/hr	24 Hour Fluid Restriction: _____ mL
	UF profile: _____	Dry body weight: _____ kg

Medications

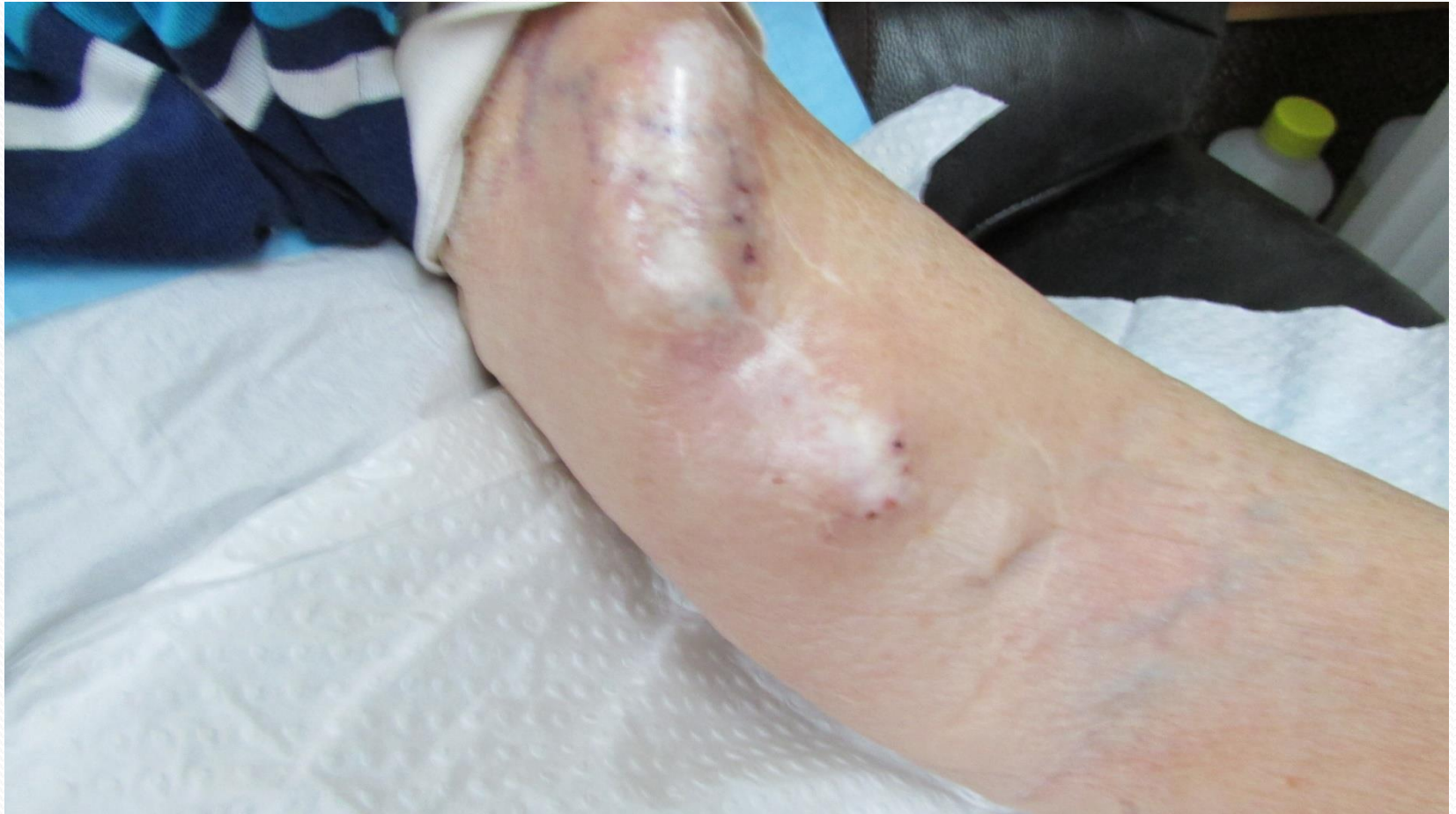
Notes

Last modified by (name): _____ Signature: _____
Designation: _____ Date: _____

Southern DHB 49183 V1 Issued 20/02/2009 Clinical Record Page 1 of 1

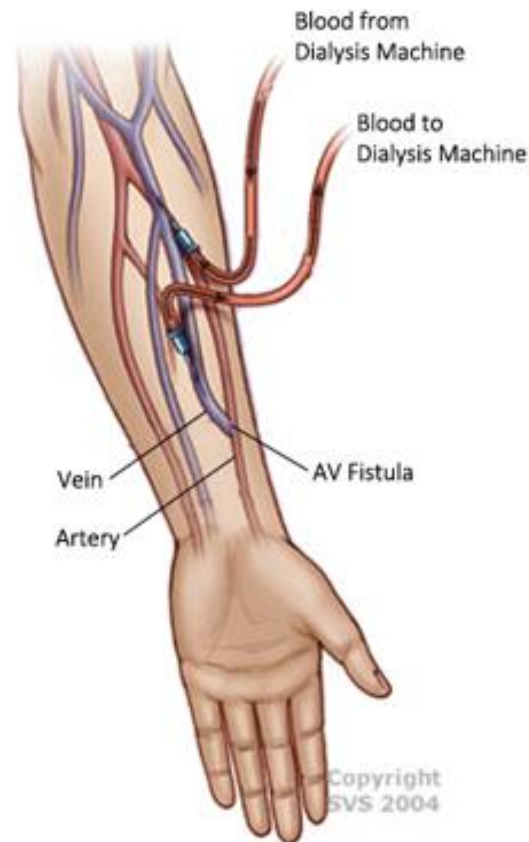
Vascular access

- A vascular access is a haemodialysis patient's lifeline. The access is a surgically created vein used to remove and return blood during haemodialysis.



What is an arteriovenous fistula?

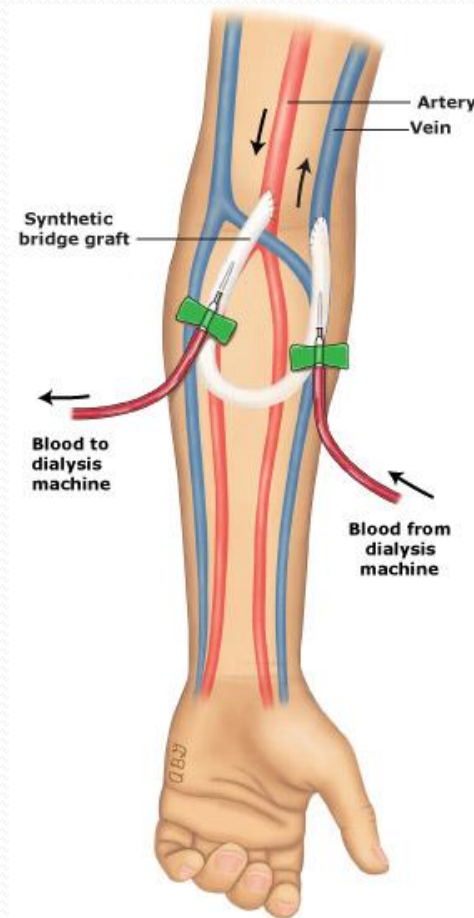
AV Fistula For Dialysis



Why recommend an AV fistula over the other types of access.

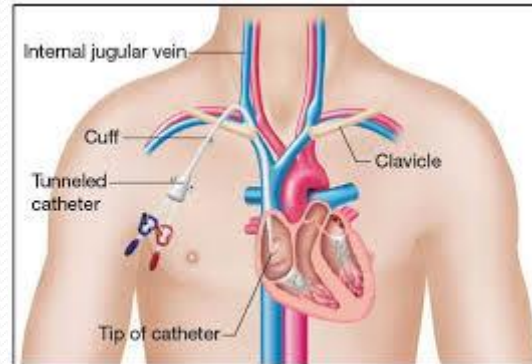
- provides good blood flow for dialysis
- lasts longer than other types of access
- is less likely to get infected or cause blood clots than other types of access

What is an arteriovenous graft?



- 
- An AV graft is a looped, plastic tube that connects an artery to a vein. A vascular surgeon performs AV graft surgery.

What is a venous catheter?



Possible Complications while on Haemodialysis


Signs	Causes	Remedies
Hypotension, light-headedness, nausea or vomiting	Sudden drop in blood pressure due to the rapid removal of fluids	Return fluids back to the body
Muscle cramps	As above	
Fatigue	Fluid exchange	Resting after treatment


Diet

- Increase protein
- Low potassium
- Low phosphorus
- Low sodium
- Daily fluid restrictions

My Day

- Start 8am
- Disinfect machine 30-40min
- Machine test
- Line machine
- Prime
- Recirculate

- 
- Pre dialysis patient assessment
 - Machine settings
 - Needle insertion and connect to machine
 - 30min post start observations
 - Hourly monitoring throughout.

- 
- Fluid management and diet discussion
 - Washback
 - Needle removal 10 min per needle
 - Machine disinfect
 - Documentation
 - Approx finish 3:30-4pm



Additional

- Monthly stock take
- UNO cleaning 45min
- Monthly bleach disinfect
- Online education
- Staff rosters
- Peer support

Meeting Competencies

- Direction and Delegation
- Documentation
- Medications
- Education

Conclusion

BECAUSE BEING
A NURSE IS MORE
THAN A JOB—
it's a way of life.

More Quotes Only on www.MyLovelyQuotes.com



Questions?

References

- www.kidney.org
- www.toltec.biz