

SHARED HAEMODIALYSIS CARE HANDBOOK

Name:

Hospital Number:

Shared Haemodialysis Care Named Nurse:

Date:

Machine Type:

Dialysis Unit:

INTRODUCTION

This handbook has been developed as a shared care education and training guide to help you learn how to take part in your own haemodialysis care. Firstly you will be taught how to do some of the simple procedures involved in dialysis. As your confidence grows, you may wish to learn more about the whole dialysis procedure.

This handbook is designed to help you to pick out only the procedures that you feel you are comfortable with, and to progress to other procedures if and when you feel ready. You will be taught by your own unit nurses at your own pace.

This handbook will become a record of your progress. Every time you attend for dialysis you can see how you are doing and what comes next. The procedures section should be signed by you and your nurse when you both feel that a level of safe practice has been achieved according to the definitions given.

Even after you have achieved a safe level of practice in your chosen procedures, you will always be under the supervision of a Qualified Nurse or level 3 Support Worker who will be there to support you and give advice.

What if I decide shared haemodialysis care isn't for me?

We realise that shared haemodialysis care doesn't suit everyone and if you no longer want to be involved, your treatment will continue to be carried out by the nursing staff. You will not be pressured into doing anything beyond your wishes or capabilities.

What if I decide I want to haemodialyse at home?

Some patients decide they'd like to haemodialyse at home, once they've gained confidence on the unit. If this is something you are interested in, please see your haemodialysis nurse for further information.

Please note that this handbook does not cover every possible task, problem or situation related to haemodialysis. Taking part in shared haemodialysis care means that staff will always be there to support you and it is important that you approach them if you have any questions, problems or doubts.



CONTENTS

Section Number & Topic/procedure

You can change or add to your choices whenever you wish



Please tick the topic/procedure you are interested in

		YES	NO	MAYBE
1	Functions of the kidney & principles of haemodialysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Doing my observations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Preparing my dialysis machine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Preparing my pack	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Programming my dialysis machine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Preparing my fistula/graft for dialysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Preparing my tunnelled line for dialysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Commencing my dialysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Discontinuing dialysis with my fistula/graft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Discontinuing dialysis with my tunnelled line	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	After my dialysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Administering my medications a) LMWH b) Erythropoietin c) Heparin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Problem solving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Progress review sheet (photocopy as required)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Functions of the kidney & principles of haemodialysis

TOPIC	DATE	DATE	DATE
Anatomy of the kidney & normal kidney function			
What happens when kidneys fail?			
Principles of haemodialysis, fluid removal & effect of fluid on the heart			



Please ask your haemodialysis nurse for written information on:

- Anatomy of the kidney
- Fluid removal from the body and its effect on the heart
- The principles of haemodialysis
- Common words used on your Haemodialysis Unit



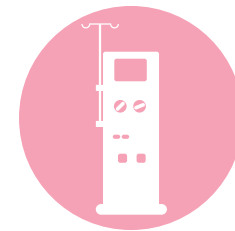
Discussion should include:

Normal kidney function

- Filtering the blood to remove excess waste and water.
- Producing the hormone, erythropoietin.
- Keeping the bones strong by balancing calcium and phosphate.
- Keeping acid and alkaline balanced in the blood.
- Controlling blood pressure.

What happens when kidney's fail?

- There is no cure, so kidney function needs to be replaced by dialysis or transplantation.
- Dialysis is not as effective as working kidneys but enables many people to live a long and full life.



Principles of haemodialysis

- Explain the blood circuit, briefly mentioning heparin/anticoagulant to stop the blood from clotting and the air detector to prevent air in blood. *(These will be elaborated on later)*
- Show / explain the water inlet and waste outlet.
- Show / explain the dialyser (artificial kidney), bloodlines and blood pump, bicarbonate cartridge / dialysate fluid.
- Blood is cleaned in the dialyser; blood flows through the middle of hollow fibres made from a semi-permeable membrane, with the dialysate fluid flowing around the outside of the fibres.

The dialysate fluid contains small amounts of the substances normally present in the blood. The membrane has tiny holes in it so that the excess fluid and wastes can be removed. At no point do the blood and dialysate fluids come into contact with each other.

PATIENT INFORMATION

If you want to find out more about your kidneys, haemodialysis & treatment please visit:
www.kidneypatientguide.org.uk
www.kidneycare.nhs.uk

Please ask your haemodialysis nurse about Renal PatientView and how to apply. You can also visit the site below to see a demonstration of how the site works www.renalpatientview.org

Patient Information

Type					
Date					

In my opinion, I have received sufficient information and have been given the opportunity to ask questions

Patient's Signature

Print Name

Date

If you don't have access to a computer, there are a number of other sources, for example patient information leaflets and books. Please ask your nurse if you require further information.



Handwashing for dialysis

1

RUB PALM TO PALM



2

BACK OF HANDS



3

PALMS FINGERS



4

BACK OF FINGERS
TO PALM



5

THUMBS



6

FINGER TIPS



7

WRISTS



8

USE PAPER TOWEL
TO TURN OFF TAPS
AND THROW



Procedure	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
Hand Hygiene									
Weight									
Pulse and Blood pressure									
Temperature									

Procedure definitions:

Hand hygiene:

- Washes hands in accordance with Unit/Hospital Policy using attached photo guide on page 6 & 7.
- Understands the importance of this in reducing infection risk.

Weight:

- Able to accurately weigh him/herself unaided and to be aware of target weight.
- Able to calculate required fluid loss.

Blood pressure:

- Able to accurately record BP unaided, understand using correct cuff size on bare arm with loose fitting short sleeves, to be aware of his/her normal BP and to recognise and report any abnormality.

Pulse:

- Able to accurately record pulse and recognise and record any abnormality.

Temperature:

- Able to accurately record temperature and to be aware of what constitutes a high temperature and the possible reasons for this.



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S = Supervised closely by qualified nurse or level 3 support worker
P = Practising to become competent under distant supervision
C = Agreed as competent by qualified nurse



I now feel safe and confident to do all of the above without direct supervision.
 I understand that by signing this, I take responsibility for following the procedure definitions.

Patient's Signature

Print Name

Date

In my opinion, a safe level of practice has been achieved in this section:

Qualified Nurse's signature

Print Name

Date

Procedure definitions:**Hand hygiene:**

- Washes hands in accordance with Unit/Hospital Policy.
- Understands the importance of this in reducing infection risks.

Turn on machine:

- Able to switch on machine correctly and select 'haemodialysis'.

Collect equipment:

- Aware of what equipment is needed and where to locate it.

**Connect acid concentrate:**

- Aware of correct concentrate.
- Checks dialysis prescription.
- Able to connect safely and securely.

Connect bicarb cartridge:

- Able to connect bicarbonate cartridge safely and securely.

Attach dialyser:

- Aware of correct dialyser.
- Checks dialysis prescription.
- Able to connect safely and securely.

Attach arterial & venous:

- Able to attach lines safely using a no touch technique.

Attach heparin syringe:

- Understands the action of heparin [see Section 12] Checks dialysis prescription.
- Able to attach the heparin syringe safely and securely.

Prime blood circuit:

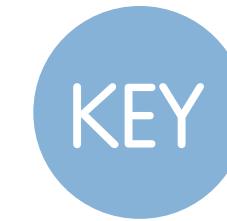
- Understands the reasons for priming blood circuit with sodium chloride (saline) solution before dialysis.
- Able to do this correctly.

Re-circulate:

- Understands the reason for re-circulating before dialysis.
- Able to do this correctly.

Attach dialysate lines to dialyser:

- Able to attach lines safely and securely, following prompt by machine.



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Date

Procedure definitions:**Hand hygiene:**

- Washes hands in accordance with Unit/Hospital Policy.
- Understands the importance of this in reducing infection risk.

Surface hygiene:

- Cleans work surface in accordance with Unit/Hospital Policy.
- Understands the importance of this in reducing infection risk.

Collect equipment:

- Aware of what equipment is needed and where to locate it.
- Refers to dialysis prescription where appropriate.

**Prepare “putting on” pack:**

- Able to set out pack correctly using ‘Aseptic Technique’.
- Understands the principles of ‘Aseptic Technique’.

Sharps Policy:

- Understands what a sharp is and how to safely handle and dispose of sharps.



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Date

Preparing my pack

Procedure	Date:	Date:	Date:	Date:	Date:	Date:
Hand Hygiene						
Surface hygiene						
Collect equipment						
Prepare "putting on" pack using aseptic technique						
Has read, understood & signed the sharps policy						

Please read and sign Sharps Policy before signing above.



Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:



5 Programming my dialysis machine

Procedure definitions:

Dialysis time:

- Able to programme in correct dialysis time.
- *Checks dialysis prescription for prescribed time.*

Fluid loss/ultrafiltration volume:

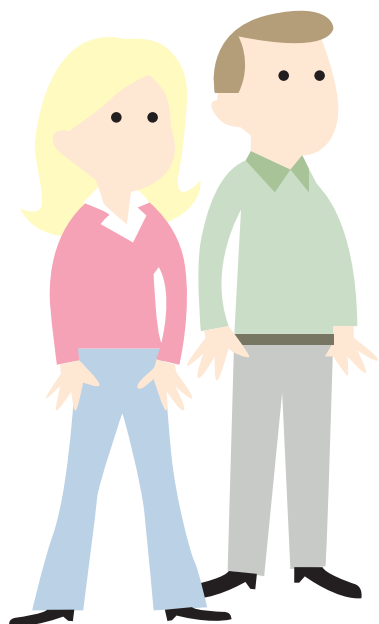
- Understands concept of target / dry weight.
- *Checks dialysis prescription for prescribed target weight.*
- Understands relevance of pre dialysis weight and BP.
- Understands how to calculate ultrafiltration (UF) volume.
- Able to programme correct ultrafiltration (UF) volume.

Sodium and bicarb levels:

- Able to programme correct sodium and bicarbonate levels and to understand the consequences if programmed incorrectly.
- *Checks dialysis prescription for prescribed sodium level.*
- *Checks dialysis prescription for prescribed bicarbonate level.*

Dialysate Flow:

- Able to programme correct dialysate flow and reasons for this.



Heparin dose and stop time:

- Understands the action of heparin and its side effects. (See Section 12)
- Able to programme correct heparin dose and stop time.
- *Checks dialysis prescription for prescribed heparin rate.*
- *Checks dialysis prescription for prescribed heparin stop time.*

Anticoagulant Regime:

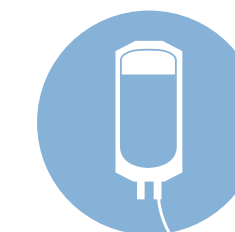
- Understands the action of the anticoagulant and understands its desired effects and side effects. (see section 12)
- *Checks drug prescription chart for prescribed amount.*

Automated Blood Pressure Monitor on HD machine:

- Able to correctly programme the automated Blood Pressure monitor as required.



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Qualified Nurse's signature	Print Name	Date
<input type="text"/>	<input type="text"/>	<input type="text"/>

5 Programming my dialysis machine

Procedure	Date:	Date:	Date:	Date:	Date:	Date:
Dialysis time						
Fluid loss / ultrafiltration volume						
Sodium and bicarb levels						
Dialysate fluid flow						
Heparin dose & stop time or Anticoagulant regime						
Automated Blood Pressure monitor on haemodialysis machine (if applicable)						



Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:



6 Preparing my fistula/graft for dialysis

Procedure definitions:

Hand & Arm hygiene:

- Able to clean hands & arm according to Unit/hospital policy.
- Understands the importance of this in reducing infection risks.

Prepare 'putting on' pack:

- Able to collect items and set out pack, correctly using 'Aseptic Technique'
- Understands the principles of 'Aseptic Technique'.

Prime needles:

- Where appropriate, prime needles with agreed flushing solution according to unit procedure.

Check fistula/graft:

- Able to check fistula/graft for bruit and signs of infection.
- Understands the importance of doing this daily as well as pre dialysis.

Assess needle sites:

- Understands how to assess most appropriate sites for insertion of needles.

Clean needle sites:

- Able to clean fistula/graft according to unit procedure.
- Understands importance of this in reducing infection risks.

Remove scabs & clean:

- Removes scabs using correct technique, according to buttonhole procedure.
- Understands importance of correct technique & additional cleaning.

Apply local anaesthetic:

- Able to apply local anaesthetic, if required, according to unit procedure.

Insert needles:

- Able to insert arterial and venous needles safely according to unit procedure.

Agreed technique:

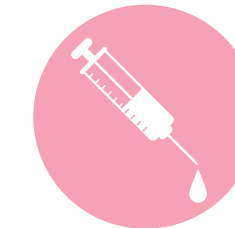
- Able to explain rationale for using a specific method i.e. buttonhole or ladder technique.

Agreed technique:

- Applies tapes to needles safely and securely according to unit procedure.



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Print Name

Date

7 Preparing my tunnelled line for dialysis

Procedure definitions:

Hand hygiene:

- Washes hands in accordance with Unit/Hospital Policy, at each appropriate stage
- Understands the importance of this in reducing infection risk.

Prepare 'putting on' pack:

- Able to collect items and set out pack, correctly using 'Aseptic Technique'
- Understands the principles of 'Aseptic Technique'

Assess exit site:

- Able to check tunnelled line and decide if dressing needs changing.

Remove & redress tunnelled line:

- If required, removes and disposes of old dressing according to unit procedure. Is aware of signs & symptoms of infection & action to take.
- Understands the importance of this in reducing risk of infection.

Cleans luer-lock connections:

- Able to clean connections using aseptic technique according to Unit procedure.

Remove luer-lock caps & aspirate locking solution

- Is aware of the importance of removing locking solution according to Unit procedure.

Assess patency:

- Able to fully assess the patency of the tunnelled line & is aware of the Unit protocol for a non-functioning tunnelled line.



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In my opinion, a safe level of practice has been achieved in this section:

Qualified Nurse's signature	Print Name	Date
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Preparing my tunnelled line for dialysis

Procedure	Date:	Date:	Date:	Date:	Date:	Date:
Hand hygiene						
Collect & prepare 'putting on' pack						
Assess exit site						
Remove old dressing & redress exit site if required						
Clean luer-lock connections						
Remove luer-lock caps & aspirate locking solution						
Assess patency of tunnelled line						



Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:



Procedure definitions:**Stop re-circulation:**

- Able to take dialysis lines out of re-circulation.

Clamp off sodium chloride (Saline):

- Understands the importance of switching off the sodium chloride (saline) before connecting bloodlines.

Attach arterial line to take out needle/port & prime out blood:

- Able to connect arterial line safely using correct technique in relation to access.
- Understands when to start blood pump & at what speed.

Attach venous line to put back needle/port & start blood pump:

- Able to connect venous line safely using correct technique in relation to access.
- Understands when to start blood pump & at what speed.

Check arterial & venous pressures:

- Able to carry out these checks correctly and understands importance of carrying out these checks at this time i.e. poor needle position, bumping/blowing etc.

Give anticoagulant:

- Gives anticoagulant using correct technique according to unit policy.
- Understands timing & need to check correct dose.

Record all pressures at baseline pump speed:

- Understands the significance of measuring all pressures at baseline pump speed.

Increase blood pump to required speed:

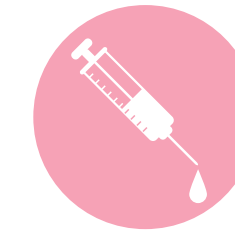
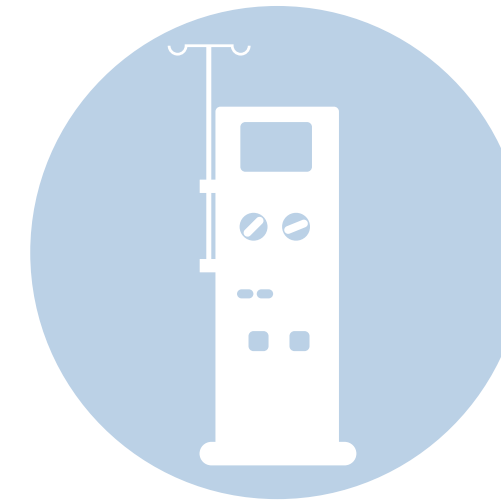
- Able to identify required pump speed and understands the importance of checking arterial and venous pressures & needle/connection sites.

Machine in 'Dialyse' mode

- Able to select 'dialyse' mode correctly & understands the consequences of failing to do so.

Re check prescription

- Able to recheck heparin dose & stop time, anticoagulant regime, dialysate concentrates and the importance of carrying them out at this time.



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Date

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Qualified Nurse's signature

Print Name

Date

Procedure definitions:**Aware of completion of dialysis:**

- Can identify when dialysis is complete.
- Understands importance of completing prescribed time dialysis.

Hand hygiene:

- Cleans using hand gel according to Unit/Hospital Policy.
- Understands the importance of doing this after the procedure, in reducing infection risk.

Connect sodium chloride (Saline) to arterial line:

- Able to safely and securely attach sodium chloride (saline) to arterial line.

'Wash back':

- Able to perform 'wash back' to ensure all the blood is returned.
- Checks for clots/streaks.
- Understands the importance of washing back all the blood.

Disconnect blood lines from fistula needles:

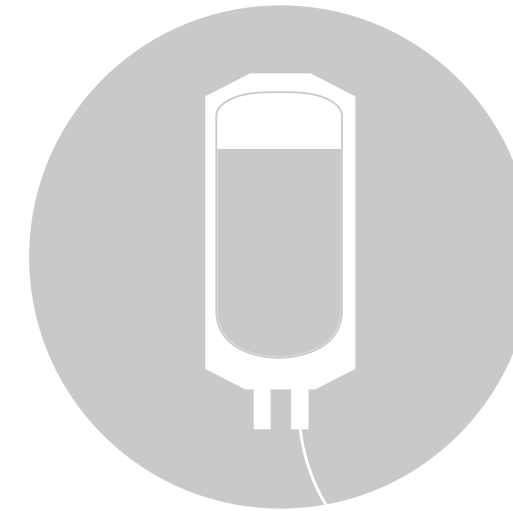
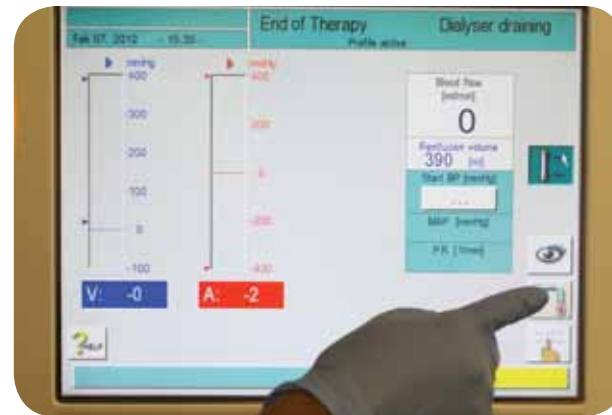
- Able to safely disconnect arterial and venous lines from fistula needles.

Remove needles, apply pressure, apply dressings:

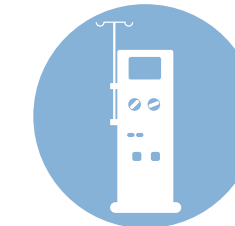
- Able to safely remove needles, apply correct amount of pressure to needle sites, Demonstrate safe disposal of fistula needles according to Unit/hospital sharps policy.
- Ensure bleeding has stopped and apply dressings.

Hand hygiene:

- Washes hands according to Unit/Hospital Policy.
- Understands the importance of doing this after the procedure, in reducing infection risk.



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Print Name

Date

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Qualified Nurse's signature

Print Name

Date

Discontinuing dialysis with my fistula/graft

Procedure	Date:	Date:	Date:	Date:	Date:	Date:
Aware of completion of dialysis						
Hand hygiene						
Connect sodium chloride (saline) to arterial line						
'wash back'						
Disconnect blood lines from fistula needles						
Remove & dispose of fistula needles, apply pressure, apply dressings						
Hand hygiene						



Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:



10 Discontinuing dialysis with my tunnelled line

Procedure definitions:

Aware of completion of dialysis:

- Can identify when dialysis is complete.
- Understands importance of completing prescribed time.

Hand hygiene:

- Cleans hands using hand gel & applies sterile gloves according to Unit procedure.
- Understands the importance of doing this before touching tunnelled line.

Collect & prepare taking off' pack:

- Able to collect items and set out pack and correctly uses 'Aseptic Technique'.
- Understands & practises the principles of 'Aseptic Technique'.

Cleans luer-lock connections':

- Able to clean connections using aseptic technique according to Unit procedure.

Connect sodium chloride (saline) to arterial dialysis line:

- Able to safely and securely attach sodium chloride (saline) to arterial dialysis line using aseptic technique & according to Unit procedure.

'Wash back':

- Able to perform 'wash back' to ensure all the blood is returned.
- Can recognise any reasons for not performing a washback.
- Checks for clots/streaks.
- Understands the importance of washing back all the blood.

Disconnect blood lines from tunnelled line:

- Is able to safely disconnect arterial and venous blood lines from tunnelled line.

Flush & lock tunnelled line:

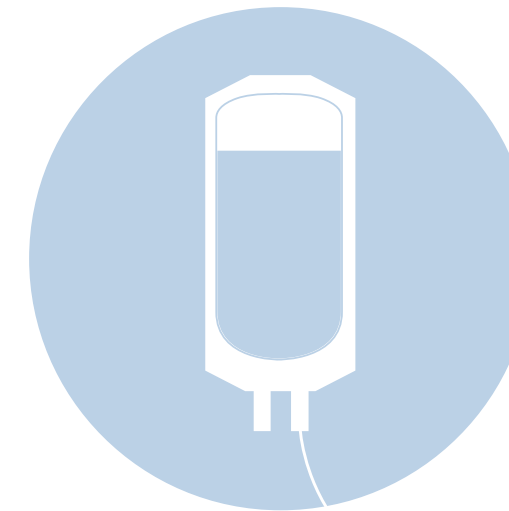
- Able to flush tunnelled line to maintain patency & is fully aware of locking guidelines.
- Able to identify correct locking solution.
- Checks drug prescription & line for correct dose.

Attach luer-lock caps:

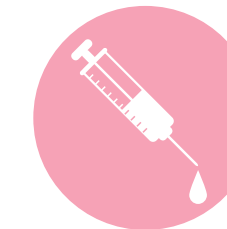
- Able to attach luer-lock caps securely & is fully aware of rationale for doing this.

Hand hygiene:

- Washes hands in accordance with Unit/Hospital Policy.
- Understands the importance of doing this after locking tunnelled line.



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In my opinion, a safe level of practice has been achieved in this section:

Qualified Nurse's signature	Print Name	Date
<input type="text"/>	<input type="text"/>	<input type="text"/>

Procedure definitions:

Strip machine and dispose of all equipment:

- Able to remove lines and dialyser from machine and understands how to safely dispose of all equipment including sharps according to Unit/Hospital Policy.
- Wears appropriate protective wear according to Unit Policy.

Rinse and disinfect machine:

- Able to rinse and disinfect machine according to unit protocol.

Clean machine externally:

- Understands the importance of cleaning machine externally in reducing infection.
- Cleans machine in accordance with Unit policy.

Record weight, BP and pulse:

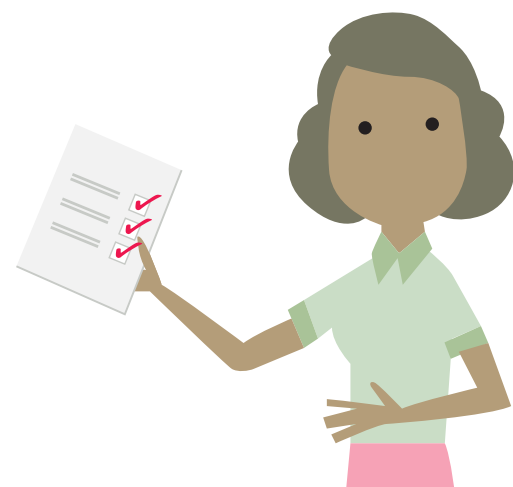
- Able to accurately record weight and BP and pulse unaided and understands the significance of these readings.

Record Temperature:

- Able to accurately record temperature and be aware of what constitutes a high temperature and the possible reasons for this.

Hand hygiene:

- Washes hands according to Unit/Hospital Policy.
- Understands the importance of hand hygiene before and after these procedures in reducing infection risk.



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Procedure	Date:	Date:	Date:	Date:	Date:	Date:
Strip machine and dispose of all equipment						
Rinse and disinfect machine						
Clean machine externally						
Record weight, Blood Pressure and pulse						
Record temperature						
Hand hygiene						



Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:



A. Administering my Low Molecular Weight Heparin (LMWH)

Procedure definitions:

Hand hygiene:

- Washes hands before & after procedure in accordance with Unit/ Hospital Policy.
- Understands the importance of this in reducing infection risk.

Checks correct dose:

- Able to correctly identify prescribed dose.
- Aware of actions & side effects of LMWH.
- Checks drug prescription chart for prescribed amount.

Clean arterial injection port:

- Identifies correct port.
- Cleans port using Unit approved agent.

Gives LMWH:

- Gives LMWH once venous line has been connected & pressures checked at 200mls/min.

Disposes of syringe:

- Demonstrates safe disposal of syringe according to Unit sharps policy.

Checks pressure before entry (PBE):

- Checks PBE pre & post dialysis.
- Identifies reason for these checks.

Checks condition of bubble trap & dialyser:

- Checks for clots & streaks post washback.
- Identifies reasons for these checks

Checks time for stop bleeding:

- Identifies time taken for needle sites to stop bleeding & recognises any changes.



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- C** = Agreed as competent by qualified nurse



I now feel safe and confident to do all of the above without direct supervision. I understand that by signing this, I take responsibility for following the procedure definitions.

Patient's Signature	Print Name	Date
<input type="text"/>	<input type="text"/>	<input type="text"/>

In my opinion, a safe level of practice has been achieved in this section:

Qualified Nurse's signature	Print Name	Date
<input type="text"/>	<input type="text"/>	<input type="text"/>

Procedure definitions:

Hand hygiene:

- Washes hands before & after procedure in accordance with Unit/Hospital Policy.
- Understands the importance of this in reducing infection risk.

Measures/aware of Blood Pressure post dialysis:

- Can identify acceptable & unacceptable blood pressure measurements in accordance with current local Anaemia Management Policy.
- Understands reasons for not giving erythropoietin.

Checks syringe:

- Able to correctly identify prescribed dose, expiry date & fluid clear of contaminates.
- Aware of colour coding in identifying correct dose.
- Aware of storage advice.
- Checks drug prescription chart for prescribed amount.
- Aware of latest haemoglobin level
- Aware of signs & symptoms of anaemia.
- Aware of actions & side effects of Erythropoietin changes.

Identifies correct injection site & gives injection:

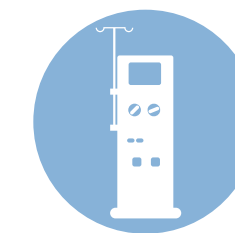
- Does not expel air from syringe.
- Injects subcutaneously e.g. arm / abdomen or inject via haemodialysis circuit.

Disposes of syringe:

- Demonstrates safe disposal of syringe according to Unit/hospital sharps policy.



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Qualified Nurse's signature	Print Name	Date
<input type="text"/>	<input type="text"/>	<input type="text"/>

B. Administering my Erythropoietin (EPO/Neorecormon/Aranesp)

Procedure	Date:	Date:	Date:	Date:	Date:	Date:
Hand hygiene						
Measure/aware of Blood Pressure post dialysis						
Check syringe						
Identify correct injection site & give injection						
Dispose of used syringe						



Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:



Procedure definitions:**Hand hygiene:**

- Washes hands before & after procedure in accordance with Unit/ Hospital Policy.
- Understands the importance of this in reducing infection risk.

Checks correct dose:

- Able to correctly identify prescribed dose.
- Aware of actions & side effects of Heparin.
- Checks drug prescription chart for prescribed amount.

Attach to arterial dialysis line & secure to machine:

- Understands which port to attach Heparin syringe and how to secure to the machine.

Enter correct Heparin dose into machine parameters:

- Understands how to set the heparin checking against dialysis prescription.

Disposes of sharps

- Demonstrates safe disposal of sharps according to Unit sharps policy.

Checks PBE (pressure before entry) into the dialyser

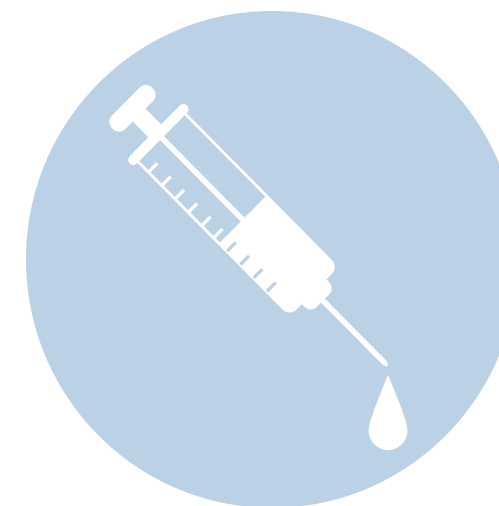
- Checks PBE (pressure before entry) pre & post dialysis.
- Identifies reason for these checks.

Checks condition of bubble trap & dialyser

- Checks for clots & streaks post washback.
- Identifies reasons for these checks.

Checks time for stop bleeding

- Identifies time taken for needle sites to stop bleeding & recognises any changes.



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Patient's Signature

Print Name

Date

In my opinion, a safe level of practice has been achieved in this section:

Qualified Nurse's signature

Print Name

Date

C. Administering my Heparin

Procedure	Date:	Date:	Date:	Date:	Date:	Date:
Hand hygiene						
Check correct dose						
Attach to arterial dialysis line & secure to machine						
Enter correct Heparin dose into machine parameters						
Disposes of sharps according to local unit sharps policy						
Checks PBE pre & post dialysis						
Check condition of bubble trap & dialyser post washback						
Check time for stop bleeding						



Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:



Procedure definitions:**Hypotension (low BP) on dialysis:****Causes:**

- removing too much fluid (usually too quickly) causing BP to drop.

Symptoms:

- Feeling faint, dizzy, nauseous, cramp, hot.

Actions:

- Ask for help.
- Stop fluid removal, lay flat and elevate feet.
- Check BP.
- Re-assess target weight.

Air detector alarm

This is a potentially serious alarm. Call for nursing assistance.

Common causes:

- Blood lines not connected securely.
- Low arterial pressure (if pump restarted without dealing with problem).

Actions:

- Ask for nursing assistance.
- Check blood lines for evidence of air bubbles.
- Check all connections are secure.
- If air is visible, you may need to re-circulate (ask for help).
- If no visible air, re-set air detector.

Arterial and venous pressure alarms**Common causes:**

- Clamps left on arterial or venous lines.
- Needle needs repositioning.
- Clotting.
- Needle 'bumped/blown' (see 'bumped/blown needle').

Actions:

- Check for clamps or kinks in lines.
- Reduce blood pump speed.
- Check needles and reposition if necessary (ask for help).
- Check lines and dialyser for signs of clotting (ask for help).
- Rectify problem and slowly increase blood pump speed.

Conductivity alarm**Common causes:**

- Machine not picking up correct amount of acid dialysate or bicarbonate due to delivery problems e.g. water problems, empty bicarb cartridge, empty acid bottle or acid supply problem.

Action:

- Check connections/probes.
- Request new bicarb cartridge/acetate bottle.
- Ask for help.

'Bumped/Blown' needle

Recognised by arterial or venous pressure alarm, pain at needle site and swelling at needle site.

Causes:

- Needle passing through the other side of the vein allowing blood to flow into the surrounding tissues.

Actions

- Insert a new needle (ask for help).

Blood leak alarm**Common causes:**

- False blood leak: air in dialysate pathway.
- True blood leak: leak in dialyser membrane.

Actions:

- False blood leak
 - Check no air in dialysate pathway.
- True blood leak
 - Look for visual signs of blood in outflow dialysate line.
 - Test with Haemastix if no blood visible.
 - Ask for help to deal with the problem according to unit protocol.



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Patient's Signature

Print Name

Date

In my opinion, a safe level of practice has been achieved in this section:

Qualified Nurse's signature

Print Name

Date

Procedure	Date:	Date:	Date:	Date:	Date:	Date:
Hypotension (low Blood Pressure) on dialysis. • causes • symptoms • actions						
Air detector alarm • causes • actions						
Venous pressure • causes • actions						
Arterial pressure alarm • causes • actions						
Conductivity alarm • causes • actions						
'Bumped/blown' needle • causes • actions						
Blood leak alarm • causes • action						

Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:

Content adapted from material developed by staff at Guys and St Thomas Hospitals
as part of a Modernisation Initiative on Self Care Dialysis.

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