

Home intravenous fluids therapy

Handbook for patients



Information for patients
Nutrition Support Service



Contents

Introduction	4
Contact numbers	4
Don't panic!	5
Why do I need parenteral nutrition?	5
More questions you may ask	5
Going home – practical issues	6
Care after discharge	6
Home monitoring and problems	7
Hand washing	8
Protocols for connecting and disconnecting IV feeds and fluids	9
Daily urinalysis	
Self monitoring charts	
Training record sheets	

Introduction

You should already have received a leaflet entitled '**Home Intravenous Fluids Therapy**'. This folder contains more answers to questions about living with Home Intravenous Fluid Therapy (HIFT) as well as instructions for setting up and taking down fluids, and for looking after your Hickman catheter or PICC.

When you are ready to go home you will be given a further information sheet. This will include:

- Contact details for the homecare company
- Details of the fluids you will be getting at home and how to use them
- Follow-up arrangements (when and where we would like to see you again)
- A copy of your equipment requirements

Please place the final information sheet in this folder and keep it safe.

Contact numbers

Northern General Hospital Switchboard

- **0114 243 4343**

Royal Hallamshire Hospital Switchboard

- **0114 271 1900**

Hazel Saddington (Nurse Specialist, Northern General Hospital)

- **0114 226 6355**

Sue McIlroy (Nurse Specialist, Northern General Hospital)

- **0114 226 6355**

Dr Kevin Page (HPN/IV fluids co-ordinator, Royal Hallamshire Hospital)

- **0114 271 2787**

Dr Hannah Delaney (HPN/IV fluids co-ordinator, Northern General Hospital)

- **0114 271 4248**

Ward P2 (Royal Hallamshire Hospital)

('Home' ward for most patients on HPN/IV fluids)

- **0114 271 2585**

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Don't panic!

The aim of this handbook is to provide answers to more of your questions and step by step guides for the procedures you will learn. You will be able to use this as a guide as you learn the procedures in hospital and when you get home.

You may have some idea of what is involved or it may be completely new to you. You may be feeling anxious at the prospect of going home and unsure whether you will be able to cope. **Don't panic!** – the team will give you all the time and attention you need until you feel confident and able to cope at home. The time taken to learn the procedures varies from patient to patient. It will probably take about 2-3 weeks to set up HIFT for you. Training may continue at home if necessary.

If you would like to involve members of your family, please let them read this handbook when they visit. At the back of this handbook is a sheet which you and the nurse training you will sign when you can safely perform each procedure. This may not mean all your training is complete but is a record of what you have learned. Support and guidance will be ongoing after you go home.

This is your copy to take home, so please feel free to write comments and reminders on it for yourself.

Why do I need home intravenous fluid therapy?

The medical and nursing staff who are looking after you believe that the best way for you to maintain well-being is for you to have fluids directly into a vein. There are several reasons why this may be necessary:

- Your bowel may be unable to absorb enough fluids
- Your bowel may be unable to absorb enough essential salts

How often will I need home intravenous fluid therapy?

Everyone is different. If your body needs a lot of fluids or if you have a stoma or fistula losing lots of fluid you may need intravenous fluids every night. Some people need HIFT less often.

How will intravenous fluid therapy be given at home?

The fluids you will have at home will be prepared and delivered to you by a homecare company who work closely with the Nutrition Support Team. They will provide the fluids, a fridge to store them in (if required), a pump and all the other equipment you will need.

Most people have their intravenous fluids delivered every two weeks. Fluids may be given overnight, or during the day if this is more convenient.

The pump will be different from the one used in hospital. You will be trained how to use it.

A nurse from the homecare company will visit you in the first few days after you go home. This is to ensure a smooth transfer from hospital to home. You may go home before your training is completed, in which case we will ask them to finish your training as well.

Going home – practical issues

Here are a few points you will want to think about before you go home...

Do you have a telephone?

A telephone is important so that you can contact someone in an emergency and so that the hospital team can contact you from time to time to see how things are going.

Do you have an electric socket near your bed?

You will need to plug your pump in to an electricity supply.

Do you have stairs in your house?

If you have been in hospital for some time, you may have difficulty coping with stairs. Also, if your bathroom is on a different floor to your bedroom, this can create difficulties at night. Discuss this with your nurse.

Where will I carry out the procedures?

You will need to carry out procedures in a clean area, close to a sink for hand washing. You will also need space to set up your dressing trolley.

Where will I store the supplies?

You will require space for your supplies. The homecare company will provide a fridge (if required) in which to store up to two weeks of fluids.

Do you need assistance with finances?

It may be possible to receive financial assistance. Ask your GP to refer you to a social worker who will be able to discuss potential benefits with you.

Care after discharge

After you have been discharged you will be seen regularly at the consultant outpatient clinic or the nurse clinic.

You will need to have blood tests to check that you are still receiving the most appropriate fluids for your condition. We will also review your prescription at least once every four months. As time goes on you may need more or fewer nights on intravenous fluids. Clinic appointments are important opportunities to do these things. They also help us to identify issues before they develop into complications and they give you an opportunity to ask questions.

Our contact details are provided near the front of this handbook and on the final information sheet.

If you are unsure of any symptoms when you are at home you can also contact the staff on the ward that you were discharged from at the hospital.

Home monitoring and problems

Observations of temperature, weight, urinalysis and Hickman catheter or PICC site should be made daily and recorded on the monitoring sheet. Please bring this with you when you come for appointments.

If any of the following occur you should contact a member of the Nutrition Team immediately:

- Hickman catheter or PICC blockage that is not easily cleared (check that it is not kinked)
- Temperature of 38°C or higher
- The Hickman catheter or PICC site becomes red or inflamed, is painful or begins to leak fluid or pus
- Weight loss or gain of more than 2kg in one week
- Glucose in the urine

If you are not sure whether you should contact the hospital, do so anyway. It is better to be on the safe side.

Hand washing technique



Palm to palm



Right palm over left back and
left palm over right back



Palm to palm, fingers interlaced



Backs of fingers to opposing palms,
with fingers interlocking



Rotational rubbing of right thumb,
clasp in left palm and vice versa



Rotational rubbing backwards and
forwards with clasp of fingers of
right hand in left palm and vice versa

Hickman catheter dressing change

Inspect the site daily. Re-dress if the dressing is dirty, wet, loose or any discharge is seen, otherwise re-dress it weekly.

Collect the following equipment:

Dressing pack
Sterile gloves
Hydrex (Chlorhexidine 2% in 70% alcohol)
IV 3000 dressing (or alternative provided)
Alcohol wipes
Alcohol gel

1. Wash your hands.
2. Clean the trolley with an Alcohol wipe.
3. Open the outer cover of the dressing pack and drop it onto the trolley.
Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
4. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
5. Peel open the packet containing the dressing and empty the dressing onto the sterile surface making sure you do not touch the dressing.
6. Pour the Hydrex into the gallipot, plastic tub or tray.
7. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
8. Remove the old dressing and inspect the site for signs of infection:
 - a) Redness
 - b) Pus
 - c) Crusting
 - d) DischargeIf any of these signs are present, finish the dressing and then contact the ward or a member of the HPN team.
9. Alcohol gel your hands and put on sterile gloves.
10. Take a swab, dip it in the Hydrex and start to clean the exit site. Work from the centre outwards. Work in an up and down, left to right motion for 15 seconds. Use more than one swab if necessary.
11. Allow the Hydrex to dry, then apply the dressing. Ensure that the catheter is not kinked and that the dressing is firmly sealed around the catheter.
12. Clear away your equipment.

Commencing intravenous fluids through a Hickman catheter

Collect the following equipment together:

Dressing pack
Hydrex (Chlorhexidine 2% in 70% alcohol)
Intravenous fluid bag
Syringe containing 0.9% Sodium Chloride
Tape
Sterile gloves
Giving set
Alcohol wipes
Alcohol gel
Pump

1. Wash your hands.
2. Clean the trolley with an Alcohol wipe
3. Open the outer wrapper of the intravenous fluid bag and hang the bag on the drip stand.
4. Peel open the giving set pack and place the opened pack on the trolley.
5. Alcohol gel your hands.
6. Remove the seal of the giving set port on the intravenous fluid bag and swab the port with an Alcohol wipe.
7. Take the giving set, close the clamp, and then remove the protective cover from the spike.
8. Without touching the spike, insert it into the giving set port of the intravenous fluid bag.
9. Open the clamp on the giving set. Prime the giving set, ensuring that all the air is removed. Load the giving set into the pump.
10. Open the outer cover of the dressing pack and drop it onto the trolley. Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
11. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
12. Pour Hydrex into the gallipot, plastic tub or tray.
13. Peel open the packet containing the prefilled sterile syringe and empty the syringe onto the sterile surface, making sure that you do not touch the syringe.
14. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
15. Fasten three pieces of tape to the trolley.
16. Remove the gauze from the end of your Hickman catheter.

17. Take the sterile towel by the corners, open it out and place it across your chest, fasten it in place with two pieces of tape. Place the Hickman catheter on the sterile towel.
18. Alcohol gel your hands and put on the sterile gloves.
19. Take two swabs and dip them in Hydrex. Use one to take hold of the needle free bung and the other the catheter clamp. Clean both thoroughly, discard both swabs.
20. Take a fresh swab, dip it in Hydrex and clean the needle free bung again. Discard the swab. Allow the needle free bung to dry.
21. Expel any air from the prefilled syringe and attach the syringe to the needle free bung. Unclamp the Hickman catheter and flush the catheter with a 'pulsating' flush.
22. **Clamp the Hickman catheter**, disconnect and discard the syringe.
23. Attach the giving set to the needle free bung and wrap the hub with sterile gauze. Secure the gauze in place with the remaining tape.
24. Unclamp the Hickman catheter, switch on the pump and set it as directed.
25. Clear away your equipment.

Changing the intravenous fluid bag for a Hickman catheter

Collect the following equipment together:

Intravenous fluid bag

Alcohol gel

Alcohol wipes

1. Wash your hands.
2. Switch off the pump.
3. **Clamp the Hickman catheter.**
4. Open outer wrapper of the intravenous fluid bag and hang the bag on the drip stand.
5. Alcohol gel your hands.
6. Remove the seal of the giving set port on the intravenous fluid bag and swab the port with an Alcohol wipe.
7. Remove the spike from the completed (empty) bag of intravenous fluid and, without touching the spike, insert it into the giving set port of the new intravenous fluid bag.
8. Open the Hickman catheter clamp, switch on the pump and set it as directed.
9. Clear away your equipment.

Discontinuing intravenous fluids and flushing procedure for a Hickman catheter

This must be carried out as soon as the intravenous fluid has run through (or is discontinued for any other reason).

Collect the following equipment together:

Dressing pack
Syringe containing 0.9% Sodium Chloride
Hydrex (Chlorhexidine 2% in 70% alcohol)
Alcohol gel
Sterile gloves
Alcohol wipes
Tape

If it is the day to change the needle free bung, add this to your equipment. You should peel open the packet of the needle free bung and empty it onto the sterile field at step 5.

1. Wash your hands.
2. Clean the trolley with an Alcohol wipe.
3. Open the outer cover of the dressing pack and drop it onto the trolley.
Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
4. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
5. Peel open the packet containing the prefilled sterile syringe and empty the syringe onto the sterile surface, making sure that you do not touch the syringe.
6. Pour Hydrex into the gallipot, plastic tub or tray.
7. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
8. Fasten three pieces of tape to the trolley.
9. Switch off the pump.
10. **Clamp the Hickman catheter.**
Remove the gauze from the hub of the Hickman catheter and disconnect the giving set.
11. Take the sterile towel by the corners, open it out and place it across your chest, fasten it in place with two pieces of tape. Place the Hickman catheter on the sterile towel.
12. Alcohol gel your hands and put on the sterile gloves.
13. Take two swabs and dip them in Hydrex. Use one to take hold of the Needle free bung and the other the catheter clamp. Clean both thoroughly, discard both swabs.
14. Take a fresh swab, dip it in Hydrex and clean the needle free bung again. Discard the swab. Allow the needle free bung to dry.

15. Expel any air from the prefilled syringe and attach the syringe to the needle free bung. Unclamp the Hickman catheter and flush the catheter with a 'pulsating' flush.

16. **Clamp the Hickman catheter**, disconnect and discard the syringe.
If this is the day to change the needle free bung then proceed following the table below.

17. Wrap the end of the Hickman catheter with sterile gauze. Secure the gauze in place with the remaining tape.

18. Clear away your equipment.

17	Remove the needle free bung.
18	Take a fresh swab, dip it in Hydrex and clean the end of the Hickman Catheter. Discard the swab. Allow the end of the catheter to dry.
19	Attach new needle free bung.
20	Wrap the end of the Hickman catheter with sterile gauze. Secure the gauze in place with the remaining tape.
21	Clear away your equipment.

Discontinuing intravenous fluids and flushing procedure for a Hickman catheter (using heparinised Sodium Chloride)

This must be carried out as soon as the intravenous fluid has run through (or is discontinued for any other reason).

Collect the following equipment together:

Dressing pack
Syringe containing 0.9% Sodium Chloride
Syringe containing heparinised Sodium Chloride
Hydrex (Chlorhexidine 2% in 70% alcohol)
Sterile gloves
Alcohol wipes
Tape
Alcohol gel

If it is the day to change the needle free bung, add this to your equipment. You should peel open the packet of the needle free bung and empty it onto the sterile field at step 5.

1. Wash your hands.
2. Clean the trolley with an Alcohol wipe.
3. Open the outer cover of the dressing pack and drop it onto the trolley.
Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
4. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
5. Peel open the packets containing the prefilled sterile syringes and empty the syringes onto the sterile surface, making sure that you do not touch the syringes.
6. Pour Hydrex into the gallipot, plastic tub or tray.
7. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
8. Fasten three pieces of tape to the trolley.
9. Switch off the pump.
10. **Clamp the Hickman catheter.**
Remove the gauze from the hub of the Hickman catheter and disconnect the giving set.
11. Take the sterile towel by the corners, open it out and place it across your chest, fasten it in place with two pieces of tape. Place the Hickman catheter on the sterile towel.
12. Alcohol gel your hands and put on the sterile gloves.
13. Take two swabs and dip them in Hydrex. Use one to take hold of the needle free bung and the other the catheter clamp. Clean both thoroughly, discard both swabs.

14. Take a fresh swab, dip it in Hydrex and clean the needle free bung again. Discard the swab. Allow the needle free bung to dry.
15. Expel any air from the prefilled syringe containing **0.9% Sodium Chloride** and attach the syringe to the needle free bung. Unclamp the Hickman catheter and flush the catheter with a 'pulsating' flush.
16. **Clamp the Hickman catheter**, disconnect and discard the syringe. **If this is the day to change the needle free bung then proceed following the table below.**
17. Expel any air from the prefilled syringe containing **heparinised Sodium Chloride** and attach the syringe to the needle free bung. Unclamp the Hickman catheter and flush the catheter with a 'pulsating' flush.
18. **Clamp the Hickman catheter**, disconnect and discard the syringe.
19. Wrap the end of the Hickman catheter with sterile gauze. Secure the gauze in place with the remaining tape.
20. Clear away your equipment.

17	Remove the needle free bung.
18	Take a fresh swab, dip it in Hydrex and clean the end of the Hickman Catheter. Discard the swab. Allow the end of the catheter to dry.
19	Attach new needle free bung.
20	Wrap the end of the Hickman catheter with sterile gauze. Secure the gauze in place with the remaining tape.
21	Clear away your equipment.

Flushing the second (white) lumen of a double lumen Hickman catheter

Flush the white (second) lumen of the Hickman catheter twice a week – for example, every Monday and Thursday.

Collect the following equipment together:

Dressing pack
Syringe containing 0.9% Sodium Chloride
Tape
Hydrex (Chlorhexidine 2% in 70% alcohol)
Sterile gloves
Alcohol wipes
Alcohol gel

If it is the day to change the needle free bung, add this to your equipment. You should peel open the packet of the needle free bung and empty it onto the sterile field at step 5.

1. Wash your hands
2. Clean the trolley with an Alcohol wipe.
3. Open the outer cover of the dressing pack and drop it onto the trolley.
Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
4. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
5. Peel open the packets containing the prefilled sterile syringes and empty the syringes onto the sterile surface, making sure that you do not touch the syringes.
6. Pour Hydrex into the gallipot, plastic tub or tray.
7. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
8. Fasten three pieces of tape to the trolley.
9. Remove the gauze from the hub of the white lumen of the Hickman catheter.
10. Take the sterile towel by the corners, open it out and place it across your chest, fasten it in place with two pieces of tape. Place the Hickman catheter on the sterile towel.
11. Alcohol gel your hands, and put on the sterile gloves.
12. Take two swabs and dip them in the Hydrex. Use one to take hold of the needle free bung and the other to take hold of the Hickman catheter clamp. Clean both thoroughly, discard both swabs.
13. Take a fresh swab, dip it in Hydrex and clean the needle free bung again. Discard the swab. Allow the needle free bung to dry.
14. Expel any air from the prefilled syringe and attach the syringe to the needle free bung. Unclamp the Hickman catheter and flush the catheter with a 'pulsating' flush.

15. **Clamp the Hickman catheter**, disconnect and discard the syringe. **If this is the day to change the needle free bung then proceed following the table below.**

16. Wrap the end of the Hickman catheter with sterile gauze. Secure the gauze in place with the remaining tape.

17. Clear away your equipment.

16	Remove the needle free bung.
17	Take a fresh swab, dip it in Hydrex and clean the end of the Hickman Catheter. Discard the swab. Allow the end of the catheter to dry.
18	Attach new needle free bung.
19	Wrap the end of the Hickman catheter with sterile gauze. Secure the gauze in place with the remaining tape.
20	Clear away your equipment.

Flushing the second (white) lumen of a double lumen Hickman catheter (using heparinised Sodium Chloride)

Flush the white (second) lumen of the Hickman catheter twice a week – for example, every Monday and Thursday.

Collect the following equipment together:

Dressing pack
Syringe containing 0.9% Sodium Chloride
Hydrex (Chlorhexidine 2% in 70% alcohol)
Alcohol gel
Sterile gloves
Alcohol wipes
Tape

If it is the day to change the needle free bung, add this to your equipment. You should peel open the packet of the needle free bung and empty it onto the sterile field at step 5.

1. Wash your hands.
2. Clean the trolley with an Alcohol wipe.
3. Open the outer cover of the dressing pack and drop it onto the trolley.
Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
4. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
5. Peel open the packet containing the prefilled sterile syringe and empty the syringe onto the sterile surface, making sure that you do not touch the syringe.
6. Pour Hydrex into the gallipot, plastic tub or tray.
7. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
8. Fasten three pieces of tape to the trolley.
9. Remove the gauze from the hub of the white lumen of the Hickman catheter.
10. Take the sterile towel by the corners, open it out and place it across your chest, fasten it in place with two pieces of tape. Place the Hickman catheter on the sterile towel.
11. Alcohol gel your hands, and put on the sterile gloves.
12. Take two swabs and dip them in the Hydrex. Use one to take hold of the needle free bung and the other to take hold of the Hickman catheter clamp. Clean both thoroughly, discard both swabs.
13. Take a fresh swab, dip it in Hydrex and clean the Needle free bung again. Discard the swab. Allow the needle free bung to dry.

14. Expel any air from the prefilled syringe containing **0.9% Sodium Chloride** and attach the syringe to the needle free bung. Unclamp the Hickman catheter and flush the catheter with a 'pulsating' flush.
15. **Clamp the Hickman catheter**, disconnect and discard the syringe.
16. Expel any air from the prefilled syringe containing **heparinised Sodium Chloride** and attach the syringe to the needle free bung. Unclamp the Hickman catheter and flush the catheter with a 'pulsating' flush.
17. **Clamp the Hickman catheter**, disconnect and discard the syringe.
If this is the day to change the needle free bung then proceed following the table below.
18. Wrap the end of the Hickman catheter with sterile gauze. Secure the gauze in place with the remaining tape.
19. Clear away your equipment.

18	Remove the needle free bung.
19	Take a fresh swab, dip it in Hydrex and clean the end of the Hickman Catheter. Discard the swab. Allow the end of the catheter to dry.
20	Attach new needle free bung.
21	Wrap the end of the Hickman catheter with sterile gauze. Secure the gauze in place with the remaining tape.
22	Clear away your equipment.

Removing Taurolock and commencing intravenous fluids through a Hickman catheter

Collect the following equipment together:

Dressing pack
Hydrex (Chlorhexidine 2% in 70% alcohol)
Intravenous Fluid bag
Syringe containing 0.9% Sodium Chloride
Tape
Empty 10ml syringe
Sterile gloves
Giving set
Alcohol wipes
Alcohol gel
Pump

1. Wash your hands.
2. Clean the trolley with an Alcohol wipe
3. Open the outer wrapper of the intravenous fluid bag and hang the bag on the drip stand.
4. Peel open the giving set pack and place the opened pack on the trolley.
5. Alcohol gel your hands.
6. Remove the seal of the giving set port on the intravenous fluid bag and swab the port with an Alcohol wipe.
7. Take the giving set, close the clamp, and then remove the protective cover from the spike.
8. Open the clamp on the giving set. Prime the giving set, ensuring that all the air is removed. Load the giving set into the pump.
9. Prime the giving set, ensuring that all the air is removed. Load the giving set into the pump.
10. Open the outer cover of the dressing pack and drop it onto the trolley.
Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
11. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
12. Pour Hydrex into the gallipot, plastic tub or tray.
13. Peel open the packet containing the prefilled sterile syringe and empty the syringe onto the sterile surface, making sure that you do not touch the syringe.
14. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
15. Peel open the packet containing the empty syringe and drop the syringe onto the sterile surface, making sure that you do not touch the syringe.
16. Fasten three pieces of tape to the trolley.

17. Remove the gauze from the end of your Hickman Catheter.
18. Take the sterile towel by the corners, open it out and place it across your chest, fasten it in place with two pieces of tape. Place the Hickman catheter on the sterile towel.
19. Alcohol gel your hands and put on the sterile gloves.
20. Take two swabs and dip them in Hydrex. Use one to take hold of the needle free bung and the other the catheter clamp. Clean both thoroughly, discard both swabs.
21. Take a fresh swab, dip it in Hydrex and clean the needle free bung again. Discard the swab. Allow the needle free bung to dry.
22. Attach the empty syringe to the needle free bung. Unclamp the Hickman catheter and gently withdraw 5ml of blood.
23. **Clamp the Hickman catheter.** Remove and discard the blood filled syringe
24. Expel any air from the prefilled syringe and attach the syringe to the needle free bung. Unclamp the Hickman catheter and flush the catheter with a 'pulsating' flush.
25. **Clamp the Hickman catheter,** disconnect and discard the syringe.
26. Attach the giving set to the needle free bung and wrap the hub with sterile gauze. Secure the gauze in place with the remaining tape.
27. Unclamp the Hickman catheter, switch on the pump and set it as directed.
28. Clear away your equipment.

Discontinuing intravenous fluids and flushing procedure for a Hickman catheter (using Taurolock)

This must be carried out as soon as the intravenous fluid has run through (or is discontinued for any other reason).

Collect the following equipment together:

Dressing pack
Syringe containing 0.9% Sodium Chloride
Syringe containing Taurolidine
Hydrex (Chlorhexidine 2% in 70% alcohol)
Sterile gloves
Alcohol wipes
Tape
Alcohol gel

If it is the day to change the needle free bung, add this to your equipment. You should peel open the packet of the needle free bung and empty it onto the sterile field at step 5.

1. Wash your hands.
2. Clean the trolley with an Alcohol wipe.
3. Open the outer cover of the dressing pack and drop it onto the trolley.
Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
4. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
5. Pour Hydrex into the gallipot, plastic tub or tray.
6. Peel open the packets containing the prefilled sterile syringes and empty the syringes onto the sterile surface, making sure that you do not touch the syringes.
7. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
8. Fasten three pieces of tape to the trolley.
9. Switch off the pump.
10. **Clamp the Hickman catheter.**
Remove the gauze from the hub of the Hickman catheter and disconnect the giving set.
11. Take the sterile towel by the corners, open it out and place it across your chest, fasten it in place with two pieces of tape. Place the Hickman catheter on the sterile towel.
12. Alcohol gel your hands and put on the sterile gloves.
13. Take two swabs and dip them in Hydrex. Use one to take hold of the needle free bung and the other the catheter clamp. Clean both thoroughly, discard both swabs.

14. Take a fresh swab, dip it in Hydrex and clean the Needle free bung again. Discard the swab. Allow the needle free bung to dry.
15. Expel any air from the prefilled syringe containing **0.9% Sodium Chloride** and attach the syringe to the needle free bung. Unclamp the Hickman catheter and flush the catheter with a 'pulsating' flush.
16. **Clamp the Hickman catheter**, disconnect and discard the syringe.
17. Expel any air from the prefilled syringe containing taurolidine and attach the syringe to the needle free bung. Unclamp the Hickman catheter and flush the catheter with a 'pulsating' flush.
18. **Clamp the Hickman catheter**, disconnect and discard the syringe.
If this is the day to change the needle free bung then proceed following the table below.
19. Wrap the end of the Hickman catheter with sterile gauze. Secure the gauze in place with the remaining tape.
20. Clear away your equipment.

19	Remove the needle free bung.
20	Take a fresh swab, dip it in Hydrex and clean the end of the Hickman Catheter. Discard the swab. Allow the end of the catheter to dry.
21	Attach new needle free bung.
22	Wrap the end of the Hickman catheter with sterile gauze. Secure the gauze in place with the remaining tape.
23	Clear away your equipment.

Dressing change for peripherally inserted central catheter (PICC)

Inspect the site daily. Redress if the dressing is dirty, wet, loose or any discharge is seen, otherwise re-dress it weekly.

Collect the following equipment:

Dressing pack

Hydrex (Chlorhexidine 2% in 70% alcohol)

IV 3000 dressing and Steristrips **or** IV Tegaderm 1650 dressing

Sterile gloves

Alcohol wipes

Alcohol gel

1. Wash your hands.
2. Clean the trolley with an Alcohol wipe.
3. Open the outer cover of the dressing pack and drop it onto the trolley.
Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
4. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
5. Peel open the packet containing the dressing and empty the dressing onto the sterile surface making sure you do not touch the dressing.
6. Pour the Hydrex into the gallipot, plastic tub or tray.
7. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
8. Remove the old dressing and Steristrips, taking care not to dislodge the PICC and inspect the site for signs of infection:
 - a) Redness
 - b) Pus
 - c) Crusting
 - d) DischargeIf any of these signs are present, finish the dressing and then contact the ward or a member of the HPN team.
9. Alcohol gel your hands and put on sterile gloves.
10. Take a swab, dip it in the Hydrex and start to clean the exit site.
Work in an up and down, left to right motion for 15 seconds. Use more than one swab if necessary.
11. Allow the Hydrex to dry, then apply the Steristrips and dressing. Ensure that the PICC is not kinked and that the dressing is firmly sealed around the PICC.
12. Clear away your equipment.

Commencing intravenous fluids through a PICC

Collect the following equipment together:

Dressing pack
Hydrex (Chlorhexidine 2% in 70% alcohol)
Intravenous fluid bag
Syringe containing 0.9% Sodium Chloride
Tape
Sterile gloves
Giving set
Alcohol wipes
Alcohol gel
Pump

1. Wash your hands.
2. Clean the trolley with an Alcohol wipe.
3. Open the outer wrapper of the intravenous fluid bag and hang the bag on the drip stand.
4. Peel open the giving set pack and place the opened pack on the trolley.
5. Alcohol gel your hands.
6. Remove the seal of the giving set port on the intravenous fluid bag and swab the port with an Alcohol wipe.
7. Take the giving set, close the clamp, and then remove the protective cover from the spike.
8. Without touching the spike, insert it into the giving set port of the intravenous fluid bag.
9. Open the clamp on the giving set. Prime the giving set, ensuring that all the air is removed. Load the giving set into the pump.
10. Open the outer cover of the dressing pack and drop it onto the trolley. Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
11. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
12. Pour Hydrex into the gallipot, plastic tub or tray.
13. Peel open the packet containing the prefilled sterile syringe and empty the syringe onto the sterile surface, making sure that you do not touch the syringe.
14. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
15. Fasten a piece of tape to the trolley.
16. Remove the gauze from the hub of the PICC.

17. Take the sterile towel by the corners, open it out and place it across the arm, place the PICC on the sterile towel.
18. Alcohol gel your hands and put on the sterile gloves.
19. Take a swab and dip it in Hydrex. Take hold of the Needle free bung and clean it thoroughly, discard the swab. Repeat this step so that you have cleaned the needle free bung twice.
20. Allow the needle free bung to dry.
21. Expel any air from the prefilled syringe and attach the syringe to the needle free bung. Flush the PICC with a 'pulsating' flush.
22. Disconnect and discard the syringe.
23. Attach the giving set to the needle free bung and wrap the hub with sterile gauze. Secure the gauze in place with the tape.
24. Switch on the pump and set it as directed.
25. Clear away your equipment.

Changing the intravenous fluid bag for a PICC

Collect the following equipment together:

Intravenous fluid bag
Alcohol gel
Alcohol wipes

1. Wash your hands.
2. Switch off the pump.
3. Open outer wrapper of the intravenous fluid bag and hang the bag on the drip stand.
4. Alcohol gel your hands.
5. Remove the seal of the giving set port on the intravenous fluid bag and swab the port with an Alcohol wipe.
6. Remove the spike from the completed (empty) bag of intravenous fluid and, without touching the spike, insert it into the giving set port of the new intravenous fluid bag.
7. Switch on the pump and set it as directed.
8. Clear away your equipment.

Discontinuing intravenous fluids and flushing procedure for a PICC

This must be carried out as soon as the intravenous fluid has run through (or is discontinued for any other reason).

Collect the following equipment together:

Dressing pack
Syringe containing 0.9% Sodium Chloride
Hydrex (Chlorhexidine 2% in 70% alcohol)
Alcohol gel
Sterile gloves
Alcohol wipes
Tape

If it is the day to change the needle free bung, add this to your equipment. You should peel open the packet of the needle free bung and empty it onto the sterile field at step 5.

1. Wash your hands.
2. Clean the trolley with an Alcohol wipe.
3. Open the outer cover of the dressing pack and drop it onto the trolley.
Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
4. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
5. Peel open the packet containing the prefilled sterile syringe and empty the syringe onto the sterile surface, making sure that you do not touch the syringe.
6. Pour Hydrex into the gallipot, plastic tub or tray.
7. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
8. Fasten a piece of tape to the trolley.
9. Switch off the pump.
10. Remove the gauze from the hub of the PICC and disconnect the giving set.
11. Take the sterile towel by the corners, open it out and place it across the arm, place the PICC on the sterile towel.
12. Alcohol gel your hands and put on the sterile gloves.
13. Take a swab and dip it in Hydrex. Take hold of the Needle free bung and clean it thoroughly, discard the swab. Repeat this step so that you have cleaned the needle free bung twice.
14. Allow the needle free bung to dry.
15. Expel any air from the prefilled syringe and attach the syringe to the needle free bung. Flush the catheter with a 'pulsating' flush.

16. Disconnect and discard the syringe.

If this is the day to change the needle free bung then proceed following the table below.

17. Wrap the end of the PICC with sterile gauze. Secure the gauze in place with the tape.

18. Clear away your equipment.

17.	Remove the needle free bung.
18.	Take a fresh swab, dip it in Hydrex and clean the end of the PICC. Discard the swab. Allow the end of the PICC to dry.
19.	Attach the new needle free bung.
20.	Wrap the end of the PICC with sterile gauze. Secure the gauze in place with the tape.
21.	Clear away your equipment.

Flushing the second (white) lumen of a double lumen PICC

Flush the white (second) lumen of the PICC twice a week – for example, every Monday and Thursday.

Collect the following equipment together:

Dressing pack
Syringe containing 0.9% Sodium Chloride
Hydrex (Chlorhexidine 2% in 70% alcohol)
Alcohol gel
Sterile gloves
Alcohol wipes
Tape

If it is the day to change the needle free bung, add this to your equipment. You should peel open the packet of the needle free bung and empty it onto the sterile field at step 5.

1. Wash your hands.
2. Clean the trolley with an Alcohol wipe.
3. Open the outer cover of the dressing pack and drop it onto the trolley.
Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
4. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
5. Peel open the packet containing the prefilled sterile syringe and empty the syringe onto the sterile surface, making sure that you do not touch the syringe.
6. Pour Hydrex into the gallipot, plastic tub or tray.
7. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
8. Fasten a piece of tape to the trolley.
9. Remove the gauze from the hub of the white lumen of the PICC.
10. Take the sterile towel by the corners, open it out and place it across the arm, place the PICC on the sterile towel.
11. Alcohol gel your hands, and put on the sterile gloves.
12. Take a swab and dip it in Hydrex. Take hold of the Needle free bung and clean it thoroughly, discard the swab. Repeat this step so that you have cleaned the needle free bung twice.
13. Allow the needle free bung to dry.
14. Expel any air from the prefilled syringe and attach the syringe to the needle free bung. Flush the PICC with a 'pulsating' flush.

15. Disconnect and discard the syringe.

If this is the day to change the needle free bung then proceed following the table below.

16. Wrap the end of the PICC with sterile gauze. Secure the gauze in place with the tape.

17. Clear away your equipment.

16.	Remove the needle free bung.
17.	Take a fresh swab, dip it in Hydrex and clean the end of the PICC. Discard the swab. Allow the end of the PICC to dry.
18.	Attach the new needle free bung.
19.	Wrap the end of the PICC with sterile gauze. Secure the gauze in place with the tape.
20.	Clear away your equipment.

Commencing intravenous fluids through a power PICC

Collect the following equipment together:

Dressing pack
Hydrex (Chlorhexidine 2% in 70% alcohol)
Intravenous fluid bag
Syringe containing 0.9% Sodium Chloride
Tape
Sterile gloves
Giving set
Alcohol wipes
Alcohol gel
Pump

1. Wash your hands.
2. Clean the trolley with an Alcohol wipe
3. Open the outer wrapper of the intravenous fluid bag and hang the bag on the drip stand.
4. Peel open the giving set pack and place the opened pack on the trolley.
5. Alcohol gel your hands.
6. Remove the seal of the giving set port on the intravenous fluid bag and swab the port with an Alcohol wipe.
7. Take the giving set, close the clamp, and then remove the protective cover from the spike.
8. Without touching the spike, insert it into the giving set port of the intravenous fluid bag.
9. Open the clamp on the giving set. Prime the giving set, ensuring that all the air is removed. Load the giving set into the pump.
10. Open the outer cover of the dressing pack and drop it onto the trolley. Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
11. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
12. Pour Hydrex into the gallipot, plastic tub or tray.
13. Peel open the packet containing the prefilled sterile syringe and empty the syringe onto the sterile surface, making sure that you do not touch the syringe.
14. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
15. Fasten a piece of tape to the trolley.
16. Remove the gauze from the end of the Power PICC.

17. Take the sterile towel by the corners, open it out and place it across the arm, place the Power PICC on the sterile towel.
18. Alcohol gel your hands and put on the sterile gloves.
19. Take two swabs and dip them in Hydrex. Use one to take hold of the needle free bung and the other the Power PICC clamp. Clean both thoroughly, discard both swabs.
20. Take a fresh swab, dip it in Hydrex and clean the Needle free bung again. Discard the swab. Allow the needle free bung to dry.
21. Expel any air from the prefilled syringe and attach the syringe to the needle free bung. Unclamp the Power PICC and flush the Power PICC with a 'pulsating' flush.
22. **Clamp the Power PICC**, disconnect and discard the syringe.
23. Attach the giving set to the needle free bung and wrap the hub with sterile gauze. Secure the gauze in place with the tape.
24. Unclamp the Power PICC, switch on the pump and set it as directed.
25. Clear away your equipment.

Changing the intravenous fluid bag for a power PICC

Collect the following equipment together:

Intravenous fluid bag
Alcohol gel
Alcohol wipes

1. Wash your hands.
2. Switch off the pump.
3. **Clamp the Power PICC.**
4. Open outer wrapper of the intravenous fluid bag and hang the bag on the drip stand.
5. Alcohol gel your hands.
6. Remove the seal of the giving set port on the intravenous fluid bag and swab the port with an Alcohol wipe.
7. Remove the spike from the completed (empty) bag of intravenous fluid and, without touching the spike insert, it into the giving set port of the new intravenous fluid bag.
8. Open the Power PICC clamp, switch on the pump and set it as directed.
9. Clear away your equipment.

Discontinuing intravenous fluids and flushing procedure for a power PICC

This must be carried out as soon as the intravenous fluid has run through (or is discontinued for any other reason).

Collect the following equipment together:

Dressing pack
Syringe containing 0.9% Sodium Chloride
Hydrex (Chlorhexidine 2% in 70% alcohol)
Alcohol gel
Sterile gloves
Alcohol wipes
Tape

If it is the day to change the needle free bung, add this to your equipment. You should peel open the packet of the needle free bung and empty it onto the sterile field at step 5.

1. Wash your hands.
2. Clean the trolley with an Alcohol wipe.
3. Open the outer cover of the dressing pack and drop it onto the trolley.
Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
4. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
5. Peel open the packet containing the prefilled sterile syringe and empty the syringe onto the sterile surface, making sure that you do not touch the syringe.
6. Pour Hydrex into the gallipot, plastic tub or tray.
7. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
8. Fasten a piece of tape to the trolley.
9. Switch off the pump.
10. **Clamp the Power PICC catheter.**
Remove the gauze from the hub of the Power PICC and disconnect the giving set.
11. Take the sterile towel by the corners, open it out and place it across the arm, place the Power PICC on the sterile towel.
12. Alcohol gel your hands and put on the sterile gloves.
13. Take two swabs and dip them in Hydrex. Use one to take hold of the needle free bung and the other the Power PICC clamp. Clean both thoroughly, discard both swabs.
14. Take a fresh swab, dip it in Hydrex and clean the Needle free bung again. Discard the swab.
Allow the Needle free bung to dry.

15. Expel any air from the prefilled syringe and attach the syringe to the needle free bung. Unclamp the Power PICC and flush the Power PICC with a 'pulsating' flush.

16. **Clamp the Power PICC**, disconnect and discard the syringe.

If this is the day to change the needle free bung then proceed following the table below.

17. Wrap the end of the Power PICC with sterile gauze. Secure the gauze in place with the tape.

18. Clear away your equipment.

17.	Remove the needle free bung.
18.	Take a fresh swab, dip it in Hydrex and clean the end of the PICC. Discard the swab. Allow the end of the PICC to dry.
19.	Attach the new needle free bung.
20.	Wrap the end of the PICC with sterile gauze. Secure the gauze in place with the tape.
21.	Clear away your equipment.

Flushing the second (purple) lumen of a double lumen power PICC

Flush the purple (second) lumen of the Power PICC twice a week – for example, every Monday and Thursday.

Collect the following equipment together:

Dressing pack
Syringe containing 0.9% Sodium Chloride
Hydrex (Chlorhexidine 2% in 70% alcohol)
Alcohol gel
Sterile gloves
Alcohol wipes
Tape

If it is the day to change the needle free bung, add this to your equipment. You should peel open the packet of the needle free bung and empty it onto the sterile field at step 5.

1. Wash your hands
2. Clean the trolley with an Alcohol wipe.
3. Open the outer cover of the dressing pack and drop it onto the trolley
Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface
4. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
5. Peel open the packet containing the prefilled sterile syringe and empty the syringe onto the sterile surface, making sure that you do not touch the syringe.
6. Pour Hydrex into the gallipot, plastic tub or tray.
7. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
8. Fasten a piece of tape to the trolley.
9. Remove the gauze from the hub of the purple lumen of the Power PICC.
10. Take the sterile towel by the corners, open it out and place it across the arm, place the Power PICC onto the sterile towel.
11. Alcohol gel hands, and put on the sterile gloves.
12. Take two swabs and dip them in the Hydrex. Use one to take hold of the needle free bung and the other to take hold of the Power PICC clamp. Clean both thoroughly, discard both swabs.
13. Take a fresh swab, dip it in Hydrex and clean the Needle free bung again. Discard the swab. Allow the needle free bung to dry.
14. Expel any air from the prefilled syringe and attach the syringe to the needle free bung. Unclamp the Power PICC and flush the Power PICC with a 'pulsating' flush.

15. **Clamp the Power PICC**, disconnect and discard the syringe.

If this is the day to change the needle free bung then proceed following the table below

16. Wrap the end of the Power PICC with sterile gauze. Secure the gauze in place with the tape

17. Clear away your equipment.

16.	Remove the needle free bung.
17.	Take a fresh swab, dip it in Hydrex and clean the end of the PICC. Discard the swab. Allow the end of the PICC to dry.
18.	Attach the new needle free bung.
19.	Wrap the end of the PICC with sterile gauze. Secure the gauze in place with the tape.
20.	Clear away your equipment.

Accessing an implanted port

Inspect the site daily. If there are any signs of infection please contact the Nutrition Support Team

Collect the following equipment:

Dressing pack
Sterile gloves
Hydrex (Chlorhexidine 2% in 70% alcohol)
Gripper needle
Extension tubing
Syringe containing 0.9% Sodium Chloride
Dressing – mepore strips (extra gauze in dressing pack)
Alcohol wipes
Alcohol gel

1. Wash your hands.
2. Clean the trolley with an Alcohol wipe.
3. Open the outer cover of the dressing pack and drop it onto the trolley.
Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
4. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
5. Peel open the packet containing the dressing and empty the dressing onto the sterile surface making sure you do not touch the dressing.
6. Peel open the packet containing the prefilled syringe and empty the syringe onto the sterile surface.
7. Peel open the packet containing the gripper needle and extension tubing - empty the contents on to the sterile surface.
8. Pour the Hydrex into the gallipot, plastic tub or tray.
9. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
10. Locate the access port of the portacath.
11. Take the sterile towel by the corners, open it out and place it across your chest, fasten it in place with two pieces of tape.
12. Alcohol gel your hands and put on the sterile gloves.
13. Connect the extension tubing to the gripper needle tubing. Expel any air from the prefilled syringe and attach the syringe to the needle free bung. Unclamp the gripper needle tubing and prime the tubing.
14. Take a swab, dip it in the Hydrex and start to clean the site. Work in a side to side, up and down motion.

15. Allow the Hydrex to dry, then insert the needle into the port as per instructions.
16. Apply the gauze and mepore strips dressing to cover and secure the gripper needle.
17. Clear away your equipment.

Commencing intravenous fluids through an implanted port (gripper needle already in-situ)

It is advisable to remove the Parenteral Feed bag from the fridge an hour or two before connecting it up, to allow it to come up to room temperature.

Collect the following equipment together:

Dressing pack
Chlorhexidine 2% in 70% alcohol solution
Intravenous Fluid bag
Syringe containing 0.9% Sodium Chloride
Tape
Sterile gloves
Giving set
Alcohol wipes
Alcohol gel
Pump

1. Wash your hands.
2. Clean the trolley with an Alcohol wipe.
3. Open the outer wrapper of the feed bag and hang the bag on the drip stand.
4. Peel open the giving set pack and place the opened pack on the trolley.
5. Alcohol gel your hands.
6. Remove the seal of the giving set port on the feed bag and swab the port with an Alcohol wipe.
7. Take the giving set, close the clamp, and then remove the protective cover from the spike.
8. Without touching the spike, insert it into the giving set port of the feed bag.
9. Open the clamp on the giving set. Prime the giving set, ensuring that all the air is removed. Load the giving set into the pump.
10. Open the outer cover of the dressing pack and drop it onto the trolley. Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
11. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
12. Pour Hydrex into the gallipot, plastic tub or tray.
13. Peel open the packet containing the prefilled sterile syringe and empty the syringe onto the sterile surface, making sure that you do not touch the syringe.
14. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
15. Fasten three pieces of tape to the trolley.

16. Remove the gauze from the end of the needle free bung.
17. Take the sterile towel by the corners, open it out and place it across your chest, fasten it in place with two pieces of tape. Place the gripper needle tubing on the sterile towel.
18. Alcohol gel your hands and put on the sterile gloves.
19. Take two swabs and dip them in Hydrex. Use one to take hold of the needle free bung and the other the tubing clamp. Clean both thoroughly, discard both swabs.
20. Take a fresh swab, dip it in Hydrex and clean the needle free bung again. Discard the swab. Allow the needle free bung to dry.
21. Expel any air from the prefilled syringe and attach the syringe to the needle free bung. Unclamp the gripper needle extension and gently pull back on the syringe plunger to observe for blood in the syringe (flash back), and flush the catheter with a 'pulsating' flush.
22. **Clamp the gripper needle tubing**, disconnect and discard the syringe.
23. Attach the giving set to the needle free bung and wrap the hub with sterile gauze. Secure the gauze in place with the remaining tape.
24. Unclamp the Gripper Needle tubing, switch on the pump and set it as directed.
25. Clear away your equipment.

De-accessing an implanted port

Collect the following equipment together:

Dressing pack
Syringe containing 0.9% sodium Chloride
Syringe containing heparinised Sodium Chloride
Hydrex (Chlorhexidine 2% in 70% alcohol)
Sterile gloves
Alcohol wipes
Tape
Alcohol gel

1. Wash your hands.
2. Clean the trolley with an Alcohol wipe.
3. Open the outer cover of the dressing pack and drop it onto the trolley.
Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
4. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
5. Peel open the packets containing the prefilled sterile syringes and empty the syringes onto the sterile surface, making sure that you do not touch the syringes.
6. Pour Hydrex into the gallipot, plastic tub or tray.
7. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
8. **Ensure that the gripper needle tubing is clamped.**
Remove the gauze from the needle free bung.
9. Take the sterile towel by the corners, open it out and place it across your chest. Fasten it in place with two pieces of tape. Place the gripper needle tubing on the sterile towel.
10. Alcohol gel your hands and put on the sterile gloves.
11. Take two swabs and dip them in Hydrex. Use one to take hold of the needle free bung and the other the extension line clamp. Clean both thoroughly, discard both swabs.
12. Take a fresh swab, dip it in Hydrex and clean the needle free bung again. Discard the swab. Allow the needle free bung to dry.
13. Expel any air from the prefilled syringe containing **0.9% Sodium Chloride** and attach the syringe to the needle free bung. Unclamp the gripper needle extension and flush the catheter with a 'pulsating' flush.
14. **Clamp the gripper needle tubing**, disconnect and discard the syringe.

15. Expel any air from the prefilled syringe containing **heparinised Sodium Chloride** and attach the syringe to the needle free bung. Unclamp the gripper needle extension and flush the catheter with a 'pulsating' flush.
16. **Clamp the gripper needle tubing while injecting the last 1ml of heparinised saline**, disconnect and discard the syringe.
17. Locate the rim of the port firmly with one hand. Holding the gripper needle with the other hand, slowly remove the needle from the port at a 90° angle.
18. Apply a piece of gauze to the site and apply pressure until any bleeding has stopped.
19. Secure a clean piece of gauze or plaster to the site.
20. Clear away your equipment.

Discontinuing intravenous fluids and flushing procedure for an implanted port (using heparinised sodium chloride) (gripper needle in-situ)

This must be carried out as soon as the feed has run through (or is discontinued for any other reason).

Collect the following equipment together:

Dressing pack
Syringe containing 0.9% sodium Chloride
Syringe containing heparinised Sodium Chloride
Hydrex (Chlorhexidine 2% in 70% alcohol)
Sterile gloves
Alcohol wipes
Tape
Alcohol gel

If it is the day to change the gripper needle extension add this to your equipment. You should peel open the packet of the gripper needle extension and another pre-filled syringe and empty them onto the sterile field at step 5.

1. Wash your hands.
2. Clean the trolley with an Alcohol wipe.
3. Open the outer cover of the dressing pack and drop it onto the trolley.
Using the corners of the inner wrapper, open the pack making sure that you do not touch the inside sterile surface.
4. Use the sterile waste bag to arrange the contents of the dressing pack on the sterile surface without touching them with your hands, then fasten the bag to the side of the trolley.
5. Peel open the packets containing the prefilled sterile syringes and empty the syringes onto the sterile surface, making sure that you do not touch the syringes.
6. Pour Hydrex into the gallipot, plastic tub or tray.
7. Peel open the packet containing the sterile gloves and empty them onto the sterile surface but do not put them on yet.
8. Fasten three pieces of tape to the trolley.
9. Switch off the pump.
10. **Clamp the gripper needle tubing.**
Remove the gauze from the hub of the gripper needle tubing and disconnect the giving set.
11. Take the sterile towel by the corners, open it out and place it across your chest, fasten it in place with two pieces of tape. Place the Hickman catheter on the sterile towel.
12. Alcohol gel your hands and put on the sterile gloves.
13. Take two swabs and dip them in Hydrex. Use one to take hold of the needle free bung and the other the extension line clamp. Clean both thoroughly, discard both swabs.
14. Take a fresh swab, dip it in Hydrex and clean the needle free bung again. Discard the swab. Allow the needle free bung to dry.

15. Expel any air from the prefilled syringe containing **0.9% Sodium Chloride** and attach the syringe to the needle free bung. Unclamp the gripper needle extension and flush the catheter with a 'pulsating' flush.
16. **Clamp the gripper needle tubing**, disconnect and discard the syringe.
17. Expel any air from the prefilled syringe containing **heparinised Sodium Chloride** and attach the syringe to the needle free bung. Unclamp the gripper needle extension and flush the catheter with a 'pulsating' flush.
18. **Clamp the gripper needle tubing**, disconnect and discard the syringe.
If this is the day to change the gripper needle extension proceed following the table below.
19. Wrap the end of the gripper needle tubing with sterile gauze. Secure the gauze in place with the remaining tape.
20. Clear away your equipment.

19.	Remove the gripper needle extension.
20.	Take a fresh swab, dip it in Hydrex and clean the end of the gripper needle tubing. Discard the swab. Allow the end of the catheter to dry.
21.	Attach the new extension tubing.
22.	Wrap the end of the gripper needle tubing with sterile gauze. Secure the gauze in place with the remaining tape.
23.	Clear away your equipment.



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