Outpatient Parenteral Antimicrobial Therapy (OPAT)

Introduction

What is Outpatient Parenteral Antibiotic Therapy (OPAT)

Antibiotics are used to fight against infections caused by bacteria. They can be given orally or injected into a vein. When antibiotics are injected, it is called intravenous (IV) or parenteral therapy. IV antibiotics can be given safely in an outpatient clinic or at home. This is called OPAT. If you are receiving OPAT at home then a nurse will ensure you have received the appropriate training and follow up prior to your discharge from hospital.

The antibiotic is given into your vein through a small narrow flexible tube called an IV line. The IV line is inserted into your vein with a needle. The needle is then removed and the IV line is left in place by a dressing. There are different types of IV lines available and the one chosen for your treatment will depend on your veins and how long you need to receive antibiotics.

The following guidelines have been prepared for carers and patients who wish to give intravenous (IV) antibiotics at home.

You will be told and shown all you need to know while you are in hospital, so that you will feel safe and confident before going home.

Each regime of treatment is individually tailored to treat the particular infection. Your regime will be clearly explained to you and written in the back of this booklet.

The guidelines will help you to have a good understanding of:

- The basic principles of giving intravenous antibiotics
- Carrying out the procedures
- Dealing correctly with any problem

We want you to feel happy, confident and relaxed about home intravenous therapy.

Hand hygiene

2. Remove rings with stones and your watch.
3. Use a separate clean towel to dry your hands when you are giving IV drugs. Or use paper towels or kitchen roll.
4. Use liquid soap or alcohol gel.

Instructions

Collect equipment:

- Alcohol hand rub
- Sharps bin
- Detergent surface wipes
- Platform tray or clean hard surface
- The medication to be given

Prepare the area:

Try to establish a routine. Use the same area each time, somewhere you can keep as clean as possible, such as a tray which should be cleaned with water and detergent, or a hard surface, which should be cleaned with a detergent wipe before use. Wash and dry your hands thoroughly before starting. Use alcohol hand rub.
Before administering any medication please check:

- Signs and symptoms of infection
- Redness/inflammation or pain around the area
- Dressing is intact and clean
- Area is dry, no signs of leakage around the site

**Intravenous Medications, please check before use:**

- Check fridge temperature and make sure fridge door has not been left open
- Patients full name is on IV antibiotics and is correct
- Correct date of birth
- Right medication
- Right diluting solution
- Right dose/amount
- It is the right time to take the medication
- Expiry dates of Infusions including the saline flushes
- Ensure all medication in packaging is intact, no seals are split or broken
- Ensure balloon is not damaged
- No signs of leakage
- No kinks in tube
- Winged luer cap in situ
- The fill port protector cap is insitu

**Things to check before connecting infusion:**

- Is everything you need in one place i.e. Tray
- Before starting ensure hands have been washed correctly and ensure dry
- Alcohol gel
- Clamp on line extension
- Remove packaging from IV antibiotics and 2 x saline flushes
- Prime saline flushes so there is no air in the line
- Unclamp IV antibiotic, prime the line, replace winged luer lock, re-clamp the line
- Open Chlorhexidine 2% wipe

**Dos and Don’ts**

**Do**

BE CLEAN:

- Hands
- Preparing tray surfaces
- Dressings
- IV insertion site

**Do**

- Allow yourself time and space to carry out the procedure.
- Try to space the drugs out evenly over a 24 hour period.
- Always give Sodium Chloride before and after drugs. Sodium Chloride is used before and between all intravenous drugs to flush the line and to prevent any adverse mixing of drugs.
- Give drugs slowly and maintain positive pressure at all times, using a push/pause technique.
- Remember we are here to help you (contacts on page 16)

**Don’t**

- Inject air into the tubing.
- Give anything if you are in doubt about:
  - a) The amount of drug
  - b) Type of drug
  - c) The site

**Don’t**

- Use the same needle or syringe twice.
How to dispose of equipment and drugs

‘Sharps’ box
These must be put into a ‘sharps’ box:
- Syringes
- Antibiotic bottles
- Drug delivery devices
The ‘sharps’ boxes must not be more that ¾ full. They should then be sealed and arrangements made with the Home Care Company for collection.

Dressings, etc.
These can be disposed of along with other household waste.

Problems and contacts page
If at any time any of the following occur, please contact Wynard Ward:
- Any difficulty injecting drugs
- Blocked IV line
- Inflammation (redness) of the site area
- Faintness or dizziness
- Pains in the back or chest
- Skin rashes/itching
- Unexpected swellings, anywhere
- High temperature (Fever)
- Nausea, vomiting or diarrhoea
- Anything else out of the ordinary
If a severe reaction occurs call an ambulance

Check list for going home on intravenous antibiotics
1. Medical and nursing team are aware and happy that treatment is to be given at home.
2. Patient/carer has been assessed preparing and administering the drugs and stated to be confident and competent (written in the patient’s notes by the assessor). The document ‘Teaching Patient/Parents/Carers Home Intravenous Antibiotic Therapy - Guidelines for Nurses’ should be referred to.
3. Information booklet and prescription regime have been given to the patient/carer.
4. All drugs have been prescribed and supplied.
5. All equipment has been supplied.
6. Patient/carer is aware of when they need blood tests (e.g. levels) and how to check the results.
7. Patient/carer is aware of when they need to be reviewed.
8. Patient/carer is aware of who they should contact if they encounter any problem.
9. The patient’s GP should be informed of discharge on treatment by whoever discharges the patient, a discharge summary will be provided
10. Patients details should be recorded in the Acute Hospital at Home list and notes available on the ward

Glossary of terms used in this booklet

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<th>Term</th>
<th>Description</th>
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<tr>
<td>PICC</td>
<td>Peripherally Inserted Central Catheter. A long thin flexible tube, inserted into a vein, to be used to give intravenous antibiotics into the bloodstream.</td>
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<td>MID line</td>
<td>Totally Implanted Venous Access Device. A device fixed under the skin for intravenous antibiotic therapy.</td>
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<td>TIVAD/Port</td>
<td>A short, thin tube inserted into a vein, used to give antibiotics into the bloodstream.</td>
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<tr>
<td>Antibiotic</td>
<td>A drug used to kill bacteria (bugs) that cause infection.</td>
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<td>Intravenous (IV)</td>
<td>In to the vein.</td>
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<td>Sodium chloride</td>
<td>Salt and water solution.</td>
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Drug reaction and anaphylaxis

Anaphylaxis is the name given to a severe reaction to a drug therapy. Fortunately this type of reaction is uncommon, but carers must be capable of recognising and dealing with such a crisis.

Reactions can be mild, moderate or severe.

Mild
- Skin irritations and minor rashes
- Nausea
- Loose stools
- Headaches
- Generally ‘off colour’

Moderate
- Vomiting
- Aches and pains

Severe
- Sudden collapse or illness
- Swelling around neck
- Severe difficulty breathing

Mild to moderate reactions may not mean stopping the treatment. However, medical advice must be sought before continuing treatment. **Severe reactions** (Anaphylactic shock) is rare but must be treated as an emergency. **CALL AN AMBULANCE (dial 999).** Lie the patient flat with feet slightly raised. This will help if there is a sudden fall in blood pressure.

HAND CLEANING TECHNIQUES

Adapted from World Health Organization Guidelines on Hand Hygiene in Health Care

Reference Number: RDE 19 231 001 (Version date: June 2020)
Competency and regime for current course of treatment

(Name of patient and/or caregiver)

Has shown to be confident and competent at administering the prescribed intravenous treatment

Signed:

Registered Nurse:

Home IV regime

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Contact Us
If you have any concerns please contact the OPAT service on
01392 406554 Mon-Fri 9am to 5pm
01392 406512 Out of Hours, Wynard Ward

Step by Step guidelines:
Remember to use hand gel between inside and outside space using

STEP 1: Make sure your surface space/tray is clean and clear
STEP 2: Place everything you need in the tray for one infusion
STEP 3: Wash hands with soap, allow to dry
STEP 4: Unclamp extension on YOUR line
STEP 5: *Gel hands as you are moving into the inside space:*
STEP 6: Open all packaging
STEP 7: Prime saline flush and Prime IV antibiotics (re-attach winged luer lock)
STEP 8: Ensure no air in Saline flushes or IV antibiotics line
STEP 9: Replace saline flush back into packaging
STEP 10: *Re-gel hands as moving from inside space to outside space:*
STEP 11: IMPORTANT: Clean extension line with chlorhexidine for 30 SECONDS and allow drying for 30 SECONDS

USING NON TOUCH TECHNIQUE:

STEP 12: Connect 10mls Saline flush to YOUR extension line using push/pause technique use all 10mls.

AT THIS STAGE: If for any reason the saline will not inject DO NOT FORCE it. STOP. Consult your nurse or Doctor via Acute hospital at Home or Wynyard (out of hours)

STEP 13: Remove saline syringe and connect IV Antibiotics
STEP 14: Make sure the Antibiotics are attached securely and there is no leakage
STEP 15: Height of bottle whilst infusion is running (To low will infuse slowly, to high will infuse too quickly)

DISCONNECTING:
- Wash or re gel hands
- Still using non-touch technique, remove empty IV Antibiotics and re flush with 10mls of Saline using push/pause technique use all 10mls.
- Dispose empty syringes and Baxter/BBraun products in sharps bin provided.
- Clean tray ready for next use