

Guide to administer antibiotics through your midline catheter for respiratory conditions

Respiratory Department
Bronchiectasis Service
Information for Patients

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Introduction

Some medications must be given by an intravenous (IV) injection. This means they are sent directly into your vein using a very thin tube. The term “intravenous” means “into the vein”.

This leaflet will guide you in administering intravenous antibiotics through your midline catheter at home.

Why do I need to have antibiotics?

Antibiotics are medicines used to treat bacterial infections. You need to have this because an infection has been identified in your chest.

Intravenous (IV) antibiotic therapy is an important part of the treatment programme for patients with respiratory conditions.

What is a midline catheter?

A midline is a long, hollow, flexible tube that is inserted into one of the large veins in your arm. The midline is used to give you intravenous treatments. This type of device is usually recommended for patients who need certain types of medicines over a long period of time.

Midlines can stay in place for approximately 8 weeks if needed. However, some patients do need to have their midline replaced during this time.

You will have a midline catheter inserted in your arm by the nurse; if we are finding this difficult to do we may need to refer you to a different team to have this inserted (e.g. the Vascular Team).

**Health information and support is available at www.nhs.uk
or call 111 for non-emergency medical advice**

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester’s Hospitals
To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk

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Equipment you will need

We will provide you with the following equipment:

- Leuer lock syringes
- Green needles (used to draw antibiotic and saline into syringes)
- Pink needles (used to draw heparin into syringe)
- Antibiotics
- Water for injection (WFI)
- Sodium chloride 0.9% (saline) pre-filled syringes
- Heparin 100 units/ml
- Alcohol wipes
- Sterile paper towels
- Alcohol hand gel
- Sharps bin to dispose of used needles and used syringes
- Bandages/ tubigrip
- You will need a plastic tray that can be washed (not provided)

Details of your medication:

Name of antibiotic: _____

Mix with _____ ml WFI (water for injection)

Special instructions:

Potential side effects of this medication:

Name of 2nd antibiotic (if applicable): _____

Mix with _____ ml WFI / saline

Special instructions:

Potential side effects of this medication:

- **To flush the midline you will need to administer:**
Sodium chloride 0.9% (saline): 5ml before and 5ml after administering antibiotic
- **Before closing the midline clamp you will need to administer:**
Heparin 100 units/ml: 2ml

Preparation

- Wash the plastic tray in hot, soapy water and dry.
- Wash and dry your hands, apply some alcohol hand gel.
- Remove bandage/ tubigrip from your arm and inspect area underneath.

If there is any of the following then **stop** and seek advice from the hospital by calling the contact number at the end of this leaflet:

- inflammation at the midline entry site.
- the area feels hot, sore or hard when touched.
- the area under the dressing is oozing or wet.
- If everything looks and feels ok then you can begin.
- Check dosage, expiry date and when to administer each drug (including, saline, WFI and heparin).
- Cover tray with a sterile paper towel, this is now your sterile area.

To draw up medication into syringes:

- Open required needles and syringes and empty onto your sterile area, being careful not to touch any of them.
- Your antibiotic will mostly be in a powdered form and needs mixing if so. Draw up required amount of WFI and add to powdered antibiotic in the glass vial which comes with it. Roll the glass vial between palms of your hands until the powder dissolves.
- You can then use green needle to draw this mixed antibiotic into a syringe.
- Draw up the remaining drugs into separate syringes and place them on your sterile area in the order in which they will be given:
 - Use green needle to draw antibiotic into syringe.
 - Use pink needle to draw heparin into syringe.
- **Make sure there is no air in any of the syringes.**

Administering your medication through your midline catheter

Follow the steps below:

1. Clean the end part of the midline (Bionector) with an alcohol wipe and leave to dry for 30 seconds.
2. Connect the syringe containing saline, unclamp the midline and slowly inject 2ml at first. If you experience any difficulty injecting the saline, if it hurts, or the midline leaks, then **stop** and seek advice from the hospital.

If you don't have any of the problems above, you can continue to inject the remaining 3ml.
3. If everything looks and feels ok continue.
4. Give 1st antibiotic slowly over 2 to 3 minutes.
5. Slowly give 5ml of saline again.
6. Give 2nd antibiotic if this has been prescribed to you.

(give 5ml of saline again after a 2nd antibiotic, to flush the midline again).
7. Give 1.5ml of heparin to start with, then close the midline clamp while injecting the remaining 0.5ml. This maintains positive pressure and prevents the backflow of blood into the midline.
8. When finished, cover your arm with the bandage or tubigrip again.
9. Dispose of used needles and syringes carefully into the sharps bin.

Administer your antibiotic as above _ _ _ _ _ times per day.

You will need to do this for _ _ _ _ _ days.

Start date: _ _ _ _ _

End date: _ _ _ _ _

Intravenous therapy advice

Do:

- **Do** be as clean as possible e.g. hands, preparation surface etc.
- **Do** check all drugs carefully - name, dose, expiry date etc.
- **Do** put all used needles and syringes in the sharps bin.
- **Do** contact the hospital for help if there is a problem, on the numbers given.

Don't:

- **Don't** inject air into a vein by making sure there is no air in any of the syringes.
- **Don't** give any drugs that you are unsure about.
- **Don't** reuse needles or syringes.
- **Don't** use any equipment that has been dropped or contaminated; use a fresh supply and start again. Further supplies can be obtained from hospital.

If you have any of the following or anything else that concerns you, don't give any more medication and contact the hospital as soon as possible for advice:

- Swelling near to the midline site
- Vomiting
- Diarrhoea
- Pain in the arm
- Shortness of breath
- A rash
- Raised temperature

Anaphylaxis

Anaphylaxis is a serious and potentially life-threatening reaction to a trigger such as an allergy. Although rare, some patients can have an anaphylactic reaction to some medicines/ drugs. The reaction can be severe and needs to be treated quickly.

Signs and symptoms of anaphylaxis:

- Breathlessness
- Husky voice
- Sudden wheezing/ noisy breathing
- Swelling of lips, face or tongue

- Feeling hot and sweating
- A fast pulse
- Rash
- Itchy skin

If you have any of these signs you need to seek urgent medical advice.

I have received explanation of the potential side effects of medication prescribed, signs of anaphylaxis and action to be taken if this occurs:

Name of patient (print name): _____

Signature: _____

Date: _____

Contact details

- **Bronchiectasis Nurse:** 0116 256 3201 (Monday to Friday, 8.30am to 5pm)
Or bleep 2595 through switchboard 0300 303 1573
- **Cystic Fibrosis Nurse:** 0116 250 2699 (Monday to Friday, 8.30am to 5pm)
- **Ward 16:** 0116 256 3107 (contact for evenings and weekends)

Please return equipment, unused items and the yellow sharps bin containing used needles and syringes, to the hospital department at the end of your treatment.

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
على هذه المعلومات بلغةٍ أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل
જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

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Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

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