

Guidelines for parents for home intravenous (IV) antibiotics

Why intravenous drugs are given at home

In discussion with your doctor, POONS or community children's nurse (CCN) it may be considered appropriate for you to administer intravenous antibiotics at home. This is only suitable for some antibiotics. By learning to administer the medicine yourself, you may be able to reduce the length of your child's stay in hospital. This may not be possible if your child is neutropenic and also depends on how well your child is.

IV antibiotics can be given:

- As a bolus injection over a few minutes
- As an infusion over an hour or so
- As a continuous infusion over several hours.

This depends on the type of drug and also the dose and strength of the drugs prescribed.

Equipment

- Clean washable tray (kept specifically for central line use)
- Non sterile gloves
- 10ml syringes
- Blue needles to draw up drugs and/or flushes
- Sterile syringe caps
- Sani-cloth disinfectant wipes
- 10ml ampoules normal saline
- 10ml ampoule water for injection
- 5ml ampoule Hepsal
- Kitchen roll/paper towel
- Clinical waste bag
- Sharps bin
- Pen
- Antibiotics as supplied

Storage of antibiotics

1. Keep any ready made medicines in sealed bags provided by pharmacy until required; place them in an airtight plastic box in the fridge – out of reach of children.
2. Vials of powder can be kept at room temperature out of reach of children.

Procedure

1. Wash your hands thoroughly before preparation, using liquid soap and dry them on a clean piece of kitchen roll or paper towel.
2. Collect all equipment needed and lay it all out next to your freshly washed tray.
3. Put on a pair of gloves.
4. Take the syringe and blue needle out of their packets and put the blue needle on the syringe. Ensure that all equipment is removed from packaging in the correct way, by separating the edges of the packaging and not pushing the syringe or bung through the packaging as this will contaminate it.
5. Draw up water (checking expiry date) into a 10ml syringe and put the empty ampoule in your yellow sharps bin.
6. Flip off the antibiotic vial lid and clean with a sani-cloth wipe. Allow to air dry for 30 seconds.
7. Dissolve the antibiotics by injecting water into the vial. Shake/roll the vial to mix the powder as instructed. **Once the mixture is clear, re-clean the lid as per point 6 above.**
8. Insert the empty syringe and needle into the vial and draw up the required amount of medicine. Make sure there are no air bubbles in the syringe. Put the sterile syringe cap onto the syringe and then place syringes on tray.
9. Remove the needle from the syringe, discard into the yellow sharps bin and replace with a sterile syringe cap.
10. Place the syringe into labelled packaging to identify it as the antibiotic.
11. Attach a blue needle to two 10ml syringes and draw up 10ml of normal saline into each. Remove the needles and place them in your yellow sharps bin. Make sure there are no air bubbles in the syringes. Put a sterile syringe cap onto each syringe. Place on the tray.
12. Attach a blue needle to a 10ml syringe and draw up 5ml of Hepsal. Remove the needle and place it in your yellow sharps bin. Make sure there are no air bubbles in the syringe. Put a sterile syringe cap onto the syringe. Place on the tray.
13. Lay out all syringes and sani-cloth wipes ready for administration.
14. Remove the gloves and wash your hands.

15. Take the tray with the syringes, sani-cloth wipes and antibiotics to your child. Lift up your child's clothing for free access to the line.
16. Put on new gloves.
17. Fully open the sani-cloth wipe and using several different parts, clean the bung thoroughly for 30 seconds and allow to air dry for 30 seconds. Once the bung has been cleaned it is important that it does not touch anything – hands, clothes, skin etc. If it does, it **must** be cleaned again with a sani-cloth wipe and allowed to air dry as before.
18. Insert the saline syringe firmly into the bung, turning gently to screw it into place. Open the switch/clamp. Slowly inject the saline into the line to ensure the line is working, flushes easily and is flowing well. Unscrew and remove the syringe.
19. **If you cannot easily flush the line, ask your child to cough, change position or raise their arms. If this does not help, do not try to force saline/Hepsal into the line. Contact the hospital for further advice.**
20. Insert the antibiotic syringe firmly into the bung, turning gently to screw it into place. Inject antibiotic over the prescribed period of time for the drug.
21. Repeat flush with the second saline syringe (see point 19 above).
22. Insert Hepsal syringe firmly into the bung, turning gently to screw it into place. If giving more than one drug, flush line with saline between drugs with a new syringe of saline and using at least 5ml of saline before and after the final drug.
23. Inject the Hepsal using a stop/start flushing technique by gently pushing the plunger, allowing a brief pause approximately every 0.5ml and clamp the line when 1ml of Hepsal is left in the syringe. Unscrew the syringe and re-clean the bung with sani-cloth wipe.
24. Place all rubbish in your yellow sharps bin. This should be returned to the hospital when finished with for incineration. Remove gloves and wash your hands.

Points to note

- You might like to keep a record of the time and date when each drug is given.
- If a needle stick or glass splinter injury occurs, wash the area thoroughly under running water for several minutes, dry and apply a plaster.

For further information and help telephone Piam Brown day ward on 023 8120 4249 or Piam Brown ward on 023 8120 4816/4817.