



## **Patients Guide for Self Administering Intravenous Antibiotics**

## **General points**

- An intravenous line is an open route for infection therefore you need to prevent this by washing your hands before any procedure relating to your line. Please see attached instructions on hand washing.
- Wear gloves provided when cleaning end of line, flushing line, and connecting intravenous antibiotic.
- Ensure the immediate environment is clean and free from clutter. It is a good idea, if at all possible, to try to keep away from children, pets and any other distractions while you are preparing and administering your antibiotic.
- Prepare the area where you can sit comfortably while the antibiotic is administered and where all the equipment is within easy reach.
- It is good practice to check expiry dates on your antibiotic, water and sodium chloride.
- Make sure you have an open sharps bin nearby to safely dispose of any needles or glass bottles. Don't put the cover back on needles as this may cause a needle injury. Your nurse will safely dispose of the sharps bin when it is no longer needed.
- The nurse will be checking your line on a regular basis and will change the dressing and bung on the end of the line weekly. If you notice any redness, swelling or pain around the site of the line or any new leakage under the dressing, contact your nurse for review and do not attempt to use the line.
- If there is any resistance when attempting to flush the line, do not force the plunger.
- Slowly and carefully follow the step-by-step guidelines until you are totally familiar with the procedure.
- Do not use needles to give antibiotics into your line.

## **VERSION A (For Infusions)**

- Find a clean, clear workspace to prepare your antibiotics.
- Wash your hands thoroughly and dry on a clean towel or kitchen paper.
- Ensure the sharps bin is open and nearby.
- Open a sterile dressing pack and put on sterile apron.
- Take out plastic waste bag and attach to edge of work surface.
- Place the following on the sterile sheet throwing away protective wrapping:
  - o Antibiotic
  - o 2 x 10ml sodium chloride
  - o 1 x 10ml water for injection
  - o 3 x 10ml syringes
  - o 3 needles
  - o Infusion giving set
  - o Bag of infusion fluid
- Place sterile gloves and folded sterile sheet to one side and spray gauze with antibacterial spray provided.
- Put on sterile gloves.
- Remove cap from antibiotic bottle.
- Attach needle to syringe, open water and draw up into syringe expelling any air.
- Immediately insert needle fully into antibiotic bottle. Push the plunger as far as possible to squirt the water into powder. Either shake vigorously or roll gently, as advised, until fully dissolved and no particles seen.
- Remove finger from plunger leaving needle in antibiotic. Syringe will automatically now fill with air. Leave to one side until needed.
- Attach needles to remaining syringes and draw up sodium chloride expelling any air.
- Pick up mixed antibiotic with attached syringe, hold upright and push plunger fully into syringe. Keeping thumb on plunger, pull tip of needle to lowest point in bottle.
- Remove thumb from plunger. The syringe will now fill with antibiotic solution.
- Any remaining antibiotic in bottle can be drawn out by pulling on the plunger.
- Remove needle from antibiotic bottle expelling any air and insert immediately into bag of infusion fluid.
- Tear off paper seal on giving set and close clamp on line.
- Break off plastic seal on infusion bag and remove protective cover off spike on end of giving set. Insert fully and immediately into bag of infusion fluid. This is quite stiff and requires some pressure – a twisting motion helps.
- Squeeze the chamber and release until half filled.

- Hang bag of fluid on coat hanger above head height.
- Hold end of line upright and slowly release wheel clamp allowing fluid to fill the line.
- Fill line to end and then close clamp and hang end of line in wheel clamp holder.
- If any air seen in tube, open clamp to waste antibiotic and expel air bubble.
- Put sterile sheet under arm.
- Using one piece of soaked gauze lift the end of the line and clean the end and place another piece of gauze under the end of the line. Slide clamp to open position.
- Remove needle from syringe containing sodium chloride, drop into sharps bin and without letting the tip of the syringe touch anything, attach to end of line and push the plunger to deliver the flush. It is good practice to push this in 1ml pulses to clear the line. If there is any resistance do not force the plunger but remove and contact your nurse.
- Remove protective cap from end of giving set ensuring this does not touch anything.
  Screw immediately to end of line.
- Slowly release the wheel clamp until you see the antibiotic dripping into the chamber.
- The nurse will have told you how long it should take to administer the antibiotic. You will need to adjust the drip rate so that the antibiotic is given over this amount of time. Check halfway through to make sure approximately half of the antibiotic has been delivered. If not you will have to open up the clamp to speed up the drip rate and if too much has gone through you will have to slow down the drip rate. It is not too important to be exact and it is better for it to go through too slowly rather than too quickly which could irritate the vein.
- When the antibiotic has gone out of the bag the chamber level will drop and the fluid will drop down the line. Don't worry about air going into the vein as some fluid will remain in the end of the line.
- Use another piece of gauze to unscrew the giving set.
- Remove the needle from the second sodium chloride syringe, drop into sharps bin, and then flush the line using the same pulsing method.
- · Close the clamp then wrap the end of the line with gauze and secure with tape as shown.
- Dispose of glass antibiotic bottle in sharps bin.
- Dispose of all other items in waste bag, seal and place in your non-recyclable bin.

## **VERSION B (For bolus)**

- Find a clean, clear workspace to prepare your antibiotics.
- · Wash your hands thoroughly and dry on a clean towel or kitchen paper.
- Ensure the sharps bin is open and nearby.
- Open a sterile dressing pack and put on sterile apron.
- Take out plastic waste bag and attach to edge of work surface.
- · Place the following on the sterile sheet throwing away protective wrapping:
  - Antibiotic
  - o 2 x 10ml sodium chloride
  - o 1 x 10ml water for injection
  - o 3 x 10ml syringes
  - o 3 needles
- Place sterile gloves and folded sterile sheet to one side and spray gauze with antibacterial spray provided.
- Put on sterile gloves.
- Remove cap from antibiotic bottle.
- Attach needle to syringe, open water and draw up into syringe expelling any air.
- Immediately insert needle fully into antibiotic bottle. Push the plunger as far as possible to squirt the water into powder. Either shake vigorously or roll gently, as advised, until fully dissolved and no particles seen.
- Remove finger from plunger leaving needle in antibiotic. Syringe will automatically now fill with air. Leave to one side until needed.
- Attach needles to remaining syringes and draw up sodium chloride expelling any air.
- · Put sterile sheet under arm.
- Using one piece of soaked gauze lift the end of the line and clean the end and place another piece of gauze under the end of the line. Slide clamp to open position.
- Remove needle from syringe containing sodium chloride, drop into sharps bin and without letting the tip of the syringe touch anything, attach to end of line and push the plunger to deliver the flush. It is good practice to push this in 1ml pulses to clear the line. If there is any resistance do not force the plunger but remove and contact your nurse.
- Pick up mixed antibiotic with attached syringe, hold upright and push plunger fully into syringe. Keeping thumb on plunger, pull tip of needle to lowest point in bottle.

- Remove thumb from plunger. The syringe will now fill with antibiotic solution.
- Any remaining antibiotic in bottle can be drawn out by pulling on the plunger.
- Remove needle from syringe containing antibiotic, drop into sharps bin and without letting the tip of the syringe touch anything, attach to end of line. Push plunger to deliver the antibiotic as a slow 'bolus'. The nurse will advise you how long this should take.
- Remove needle from other syringe containing sodium chloride and without letting the tip of the syringe touch anything, attach to end of line and push the plunger to deliver the flush.
- · Close the clamp then wrap the end of the line with gauze and secure with tape as shown.
- Dispose of glass antibiotic bottle in sharps bin.
- Dispose of all other items in waste bag, seal and place in your non-recyclable bin.
- If you have any problems causing you concern contact the MAAT team or if out of hours/ urgent then go to A&E.