

Department of
NURSING

Continuous Elastomeric Infusion Pump



Why Do I Need a Continuous Elastomeric Infusion Pump?

- You need a continuous elastomeric infusion pump when you need medication given to you all the time. For example, antibiotics.

What is a Continuous Elastomeric Infusion Pump?

- It is a pump that you throw away after use.
- It gives your medication to you all the time at the same speed through your vein.
- The medication may be finished in one or two days, depending on the doctor's order.
- As the medication flows into the veins, the balloon inside the pump will slowly get smaller from the bottom. This happens over one to two days.



Pump before infusion
(Expanded balloon)



Pump at the end of infusion
(Deflated balloon)

What Do I Need To Do When The Pump is Empty?

- You will get a schedule to visit the clinic. The nurse will change the pump for you.

How Do I Take Care of My Infusion Pump?

Do's

When Carrying the Pump

- Always keep it in the bag we give you.
- Use a sling bag to carry it around your waist or across your body.
(see Fig.1)



Fig.1

When Taking a Bath or Shower

- Keep the pump dry by covering it with a plastic bag.

When Sleeping

- Place the pump above the floor. For example, on a bedside table or on top of bed covers.

Don'ts

Sleeping During Infusion

- Do not put pressure on the pump
- Do not disconnect the pump

Parts of an Elastomeric Infusion Pump



Expert Tips

When the Pump Has Not Gotten Smaller After Six Hours

- Keep the clamp open
- Check there is no kink in the tubing
- Contact the nurse right away

Pump or Tubing Is Leaking

- Close the clamp above where it is leaking
- Clean the area where the medicine touched
- Call the nurse right away

Pump Tubing Is Disconnected From Your Line or Cannula

- DO NOT reconnect it
- Keep the used bottle
- Contact the nurse right away

You May Contact Nurses at Outpatient Parenteral Antibiotic Therapy (OPAT):

During office hours on weekdays 0800 – 1730 hours	6357 2320
After office hours/ weekends/ public holidays 0800 – 1230 hours	9722 6243 Or visit the Emergency Department



Step 4: Clean Your Hands

- Wash and dry your hands or use the hand sanitizer



Step 5: Expose Injection Port

- Remove the Tubifast and gauze
- Be careful NOT to pull on the tubing

Step 6: Remove Used Pump

1. Clean the connection point between the luer lock (part that connects) of pump and connector of PICC (tube in your arm) with alcohol swab
2. Remove the old pump by turning it counter-clockwise (to the left)
3. Clean the septum (rubber part) and thread of the connector (screw part) with alcohol swab 10 times each

1



Clean and remove used tubing

2



After removing used tubing

3



Thread

Septum

Leave alcohol swab under connector after cleaning

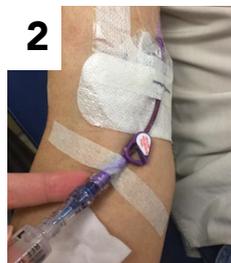
Step 7: Prepare Pre-filled Normal Saline Syringe to Check Patency of PICC

1. Take syringe out of package and check expiry date
2. Press the plunger with cap still on
3. Remove cap from syringe without touching the tip
4. Push the air bubbles out until you see one drop of saline at the tip



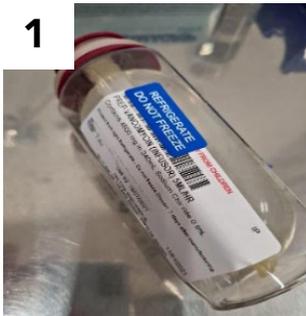
Step 8: Perform Patency Check of PICC

1. Connect the pre-filled syringe to the PICC connector
2. Pull the syringe plunger towards you until you see blood in the line
3. Push in 10 ml of normal saline using the push-and-pause method
4. Remove and throw away the syringe
 - DO NOT push the saline in forcefully if you feel resistance.
 - Check that the clamp is opened.
 - Call the nurse if you cannot flush the line



Step 9: Check Medicine Label Before Putting Pump in Bag

1. Check if the details on the medicine label are correct:
 - Patient name and NRIC
 - Medicine name and amount
 - Expiry or "used by" date
2. Put the pump in the bag we give you



Step 10: Get Ready and Connect Pump

1. Clean the septum and thread of the connector with alcohol swab 10 times each
2. Clean the end cap of the pump before removing it
3. Look for a drop of medicine. This shows the pump is infusing medicine
4. Connect the medicine tubing to the PICC connector by turning clockwise (**turn right**) to lock it



Step II: Secure Tubing

1. Wrap the connection port in a piece of gauze and tape it down
2. Secure the PICC with Tubifast for extra support



Issuance of Medication

- To help you change the pump correctly at home, you or your caregiver will show how to change the pump with a nurse watching on the day you go home. Once you or your caregiver can change the pump correctly, the nurse will give you the medicine pump.
- A nurse will connect one medicine pump when you come for consultation. You will get another one to two pumps to change at home for the next one to two days only.
- On the next day of consultation, you or your caregiver need to come back to get pumps for the next few days between 4.30pm to 5.30pm.
- If your medicine is given daily the nurse will tell you when to come back to get your medicine pumps.

Transportation and Storage of Medicine pumps

- Your medicine pump needs to stay cold in the refrigerator between 2°C to 8°C. You will need to bring it home in a cooler bag with ice pack.

On the Day You Get Medicine pumps:

At Home, Before Coming to the Hospital

- Place one to two ice packs (they should be in the freezer for at least one day) to one side of the cooler bag and zip it up

At Clinic, Just Before Leaving the Hospital

- Place the medicine pumps into the cooler bag with ice packs
- Keep the cooler bag zipped up when traveling
- Go home right away after getting the medicine
- Put the medicine pumps in the refrigerator right away when you get home
- Keep the medicine pumps by themselves on the upper shelf of the refrigerator, away from other things.

Note:

- DO NOT put pressure over the pump
- DO NOT put the pump in the microwave or under direct heat or sunlight
- DO NOT put the pump in water to warm up the medicine

Important Information for Patients:

- Length of infusion (approximate):
 - 24 hours
 - 48 hours
 - Others: _____
- Time to change the pump on the first day at home:

- Time to change the pump from the second day onwards:

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Close Tubing Clamp to Stop Infusion and Notify Nurse When Experience the Following Conditions:

- Fever
- Rash
- Shortness of breath
- Eye or lip swelling
- Part of PICC or entire PICC line has slipped or been pulled out
- Leaking from the line
- Cannot flush PICC line
- Medicine pump is leaking
- Swelling, pain, or pus at PICC insertion site
- Arm with the PICC is swollen

Outpatient Parenteral Antibiotic Therapy (OPAT) Clinic
TTSH Medical Centre, Basement 2

Contact:
6357 2320 (OPAT Clinic)
6256 6011 (General Enquiries)

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