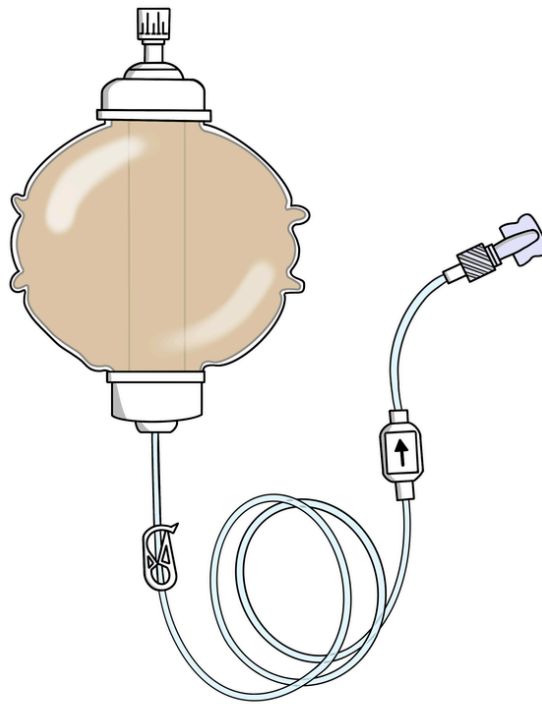


# ELASTOMERIC PUMPS



An elastomeric (or “balloon”) pump is a medical device that is filled with a prescribed medication. It uses pressure to deliver the medication intravenously. It does not use electricity or gravity flow for administration. This pump is a single-use device.

The PIVOT Nurse will explain how to use the pump before you go home. They will make sure you understand how it works. It is important to only perform those procedures you have been taught. You should feel confident about using the pump before you give your child antibiotics this way. The following information will support your learning. You can use it as a reference at home.

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## How does the elastomeric pump work?

The pump uses the difference in pressure between the balloon and your child's central line to push medication from the balloon to your child. A **flow restrictor** controls how fast the medicine moves from the balloon. The flow restrictor ensures that your child gets the right amount of medication at the right time.

The **flow rate** is the speed with which medication moves from the balloon to your child. The flow rate can depend on how high or low the pump is, compared to the central line. Your child's pump should be worn between your child's hips or shoulders during the infusion. If you have questions about where to place the pump, please ask your a nurse.

Calea Pharmacy fills the elastomeric pump and the connected tubing with the antibiotic.

The medication will need to be given on time as your doctor has prescribed. This is usually one, two or three times per day. A PIVOT nurse or Vascular Access Team member will teach you how to do this.

You will be given weekly follow-up appointments before going home. It is very important that you return for these appointments.

If there are problems with the pump you can contact the PIVOT team or the Calea Pharmacy. (See "Contact information," pg. 26, for phone numbers and hours). If you are unable to get through or you need help after hours, you may need to return to the hospital to have the central line or pump checked. (See "After-hours planning," pg. 29).

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## Using the elastomeric pump

When your child starts using the elastomeric pump, they will need to make some small changes:

- When your child is in bed, the pump can go beside them. Try to place the pump between your child's hips and shoulders. This will allow the medicine to infuse properly.
  - Your child must not play contact sports while they have a PICC. Contact sports include activities where people could bump into one another, like soccer or hockey.
  - Choose a quiet time for your child's infusion. Your child can read books or watch TV while they are attached to the pump.
  - If your child needs to use the washroom while attached to the elastomeric pump, you can put it in your child's sweater pocket. Or, your child can carry it in their hand.
  - If you have animals at home, keep the elastomeric pump out of reach at all times.
  - Be careful with your PICC to make sure it does not get pulled or damaged.
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# How will I know the elastomeric pump is working?

1. The elastomeric pump begins working when it is attached to your child's PICC, and the clamps on the PICC and the elastomeric pump tubing are open.
2. The elastomeric pump infuses your child's medication over a time frame determined by Calea Pharmacy (usually 30 minutes).
3. About 10-15 minutes into the infusion, the elastomeric pump should appear half empty.
4. When the medication infusion is complete, the elastomeric pump should be empty and appear completely deflated.

## Troubleshooting the elastomeric pump

If the elastomeric pump still appears full after starting the infusion:

- Check that the clamps on the pump and PICC tubing are open.
- Check for kinks in the infusion line. Straighten the infusion line to remove any kinks.

If you cannot fix the problem, call the PIVOT Clinic or the Vascular Access Team.

