

Elastomeric balloon pump: Use of triway to fill!

Sir,

Elastomeric infusion pumps, also known as balloon pumps, of volume ranging from 100 to 400 ml, are designed to deliver medications (local anaesthetics, opioids and anticancer drugs) to ambulatory patients through intravenous, intra-arterial, subcutaneous or epidural route.^[1]

Elastomeric balloon reservoirs can be filled by syringes manually. The operation of these devices may be time consuming and cumbersome and may potentially introduce infection as it requires multiple attempts of loading of diluents and drugs in the reservoir pump.

The filling instructions as provided by various manufacturers recommend the use of syringe for filling the pump under complete aseptic precautions. Filling of the pump requires that the entire unit to be kept in a vertical position without grasping the infusor device as shown in Figure 1.^[1]

We suggest an alternate simple, convenient and less time consuming method of filling the elastomeric pumps. We employed a sterile, plastic collapsible bottle 500 ml normal saline, an intravenous drip set,

a triway and 20 ml or 50 ml syringe with Luer lock as shown in Figure 2.



Figure 1: Conventional filling method

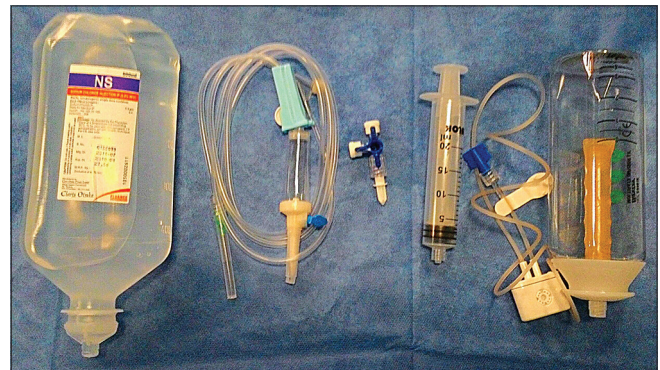


Figure 2: Components needed for new assembly

**Abinash Patro, Vansh Priya, Rameez Riaz,
Sanjay Dhiraaj**

Department of Anaesthesia, S.G.P.G.I.M.S, Lucknow,
Uttar Pradesh, India

Address for correspondence:

Dr. Vansh Priya,
3/279, Vishwaskhand, Gomti Nagar, Lucknow, Uttar Pradesh, India.
E-mail: vanshkh@gmail.com

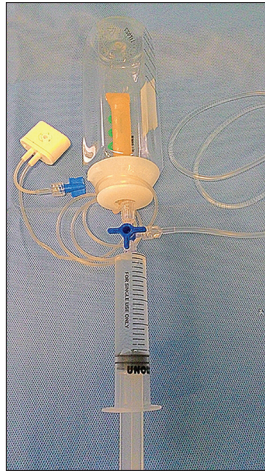


Figure 3: Assembly of components

The triway is connected to filling port of infusion pump. The main port of triway is connected to the drip bag and the side port to the syringe as shown in Figure 3. Strict aseptic precautions among others should be exercised during assemblage of components and during filling of reservoir pump. Using this simple assembly, elastomeric infusion pumps can be filled with relatively much more ease.

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Conflicts of interest

There are no conflicts of interest.

REFERENCE

1. Baxter Elastomeric Pumps Clinician Guide. Available from: <http://www.capca.ca/wp-content/uploads>. [Last accessed on 2015 Dec 07].

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