

محاضرة رقم 3

Lecture No3.

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ANESTHETIC EQUIPMENT

intravenous giving sets

Sawa University

College of health and medical
techniques

Department of Anesthesia

.....second..... Stage

جامعة ساوة

الاهلية

كلية التقنيات الصحية

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قسم تقنيات التخدير

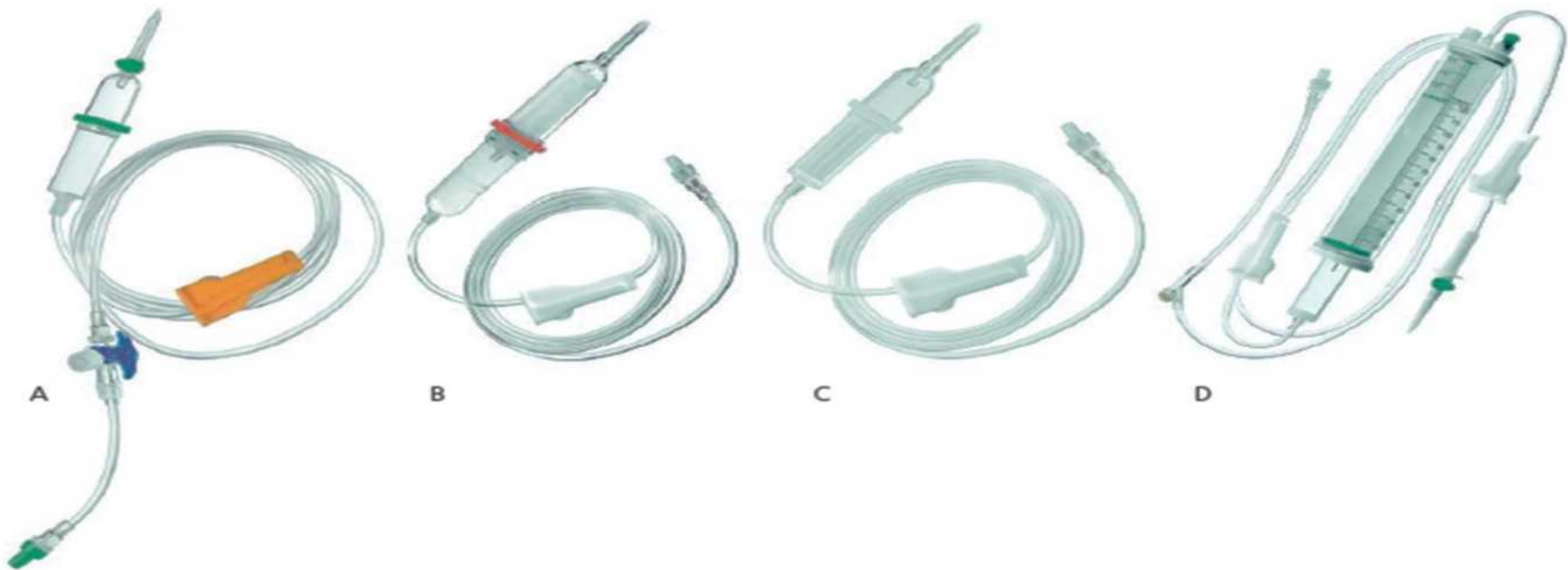
المرحلة الثانية

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استاذ المادة : د. حسن جساب
البركي

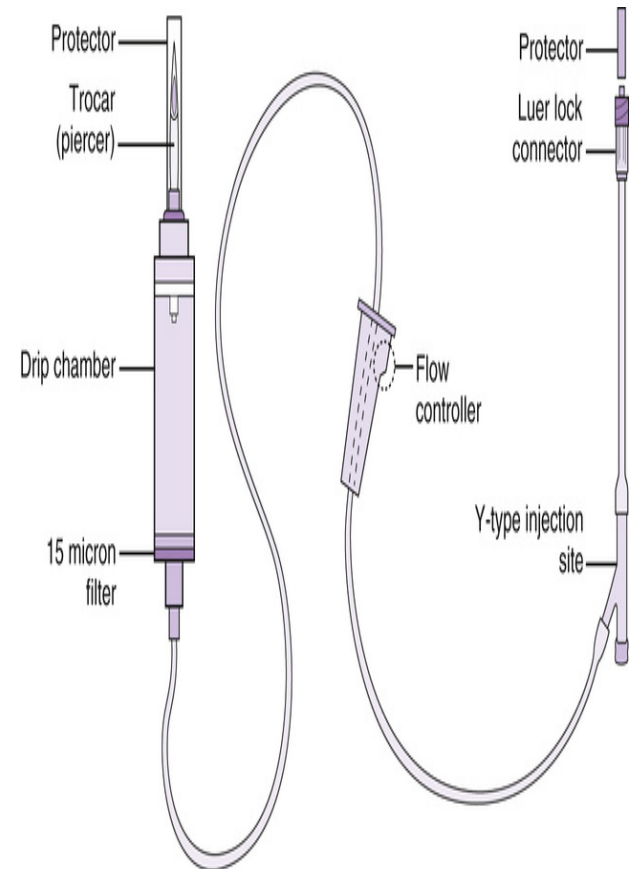
IV giving sets

A collection of sterile devices designed to conduct fluids, blood, and blood products from an intravenous (IV) container to a patient's venous system



components of intravenous giving sets

1. A **spike** to pierce the rubber stopper or port on the IV container
2. A **drip chamber** for trapping air and adjusting flow rate
3. A **control clamp** for adjusting flow rate or shutting down the flow
4. **Flexible tubing** to convey the fluid



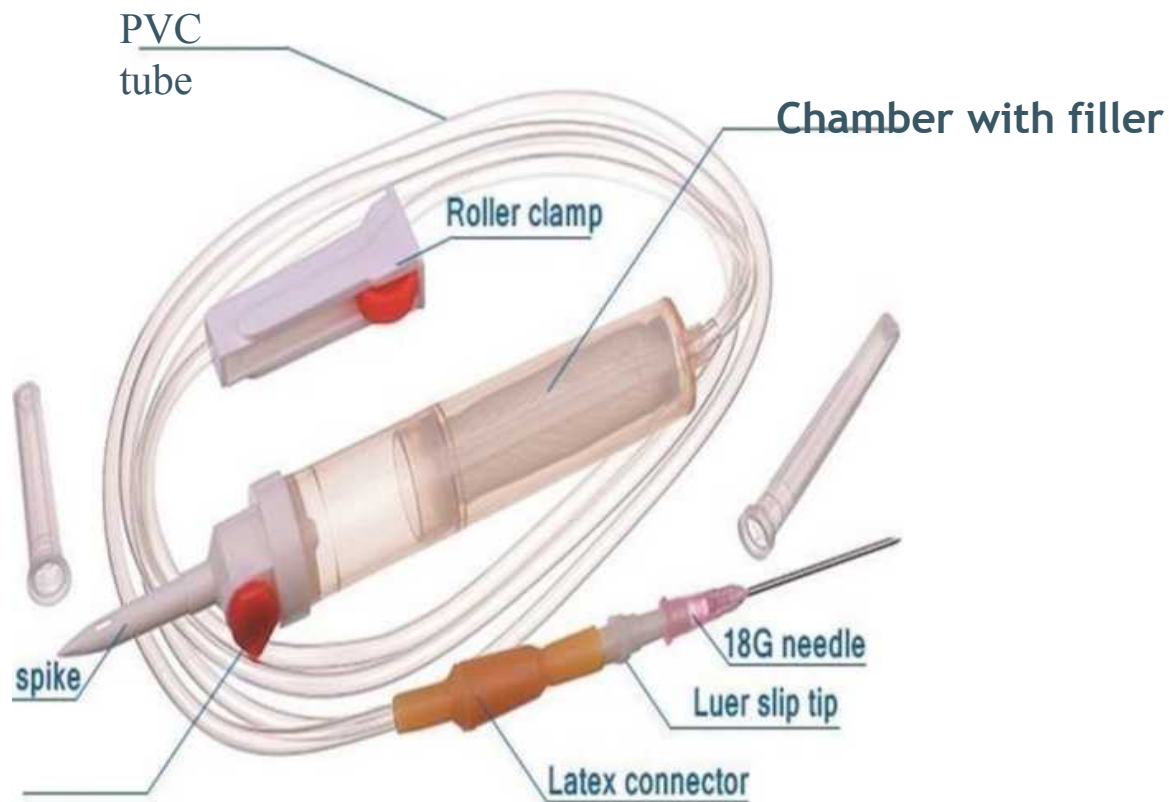
Types of I V giving sets

1. Adult giving set:

- a) A clear plastic tube of about 175 cm in length and 4 mm in internal diameter. One end is designed for insertion into the fluid bag where as the other end is attached to an intravascular cannula



b) filter with a mesh of about 150-200 μ m and a fluid chamber

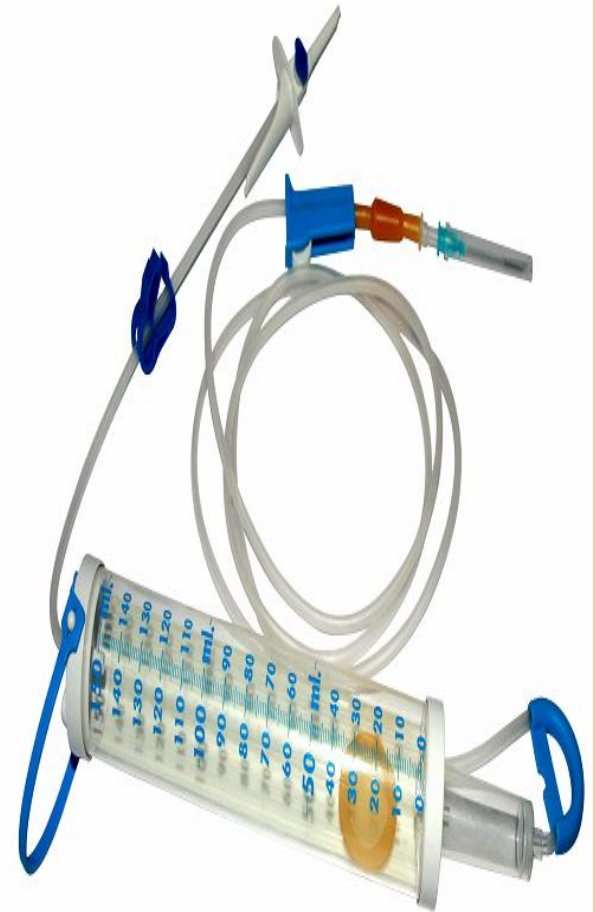


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2- **Pediatrics sets** Are used, for **more accurate and controlled delivery** of IV fluids and drugs . The dependent end of the burette's chamber empties into a drip chamber through a '**microdropper**' that delivers **60 drops/ml** of **fluid**.

❖ Most burettes also incorporate a **floating ball valve** that prevents entrainment of air from the empty **burette** chamber into the **drip chamber**

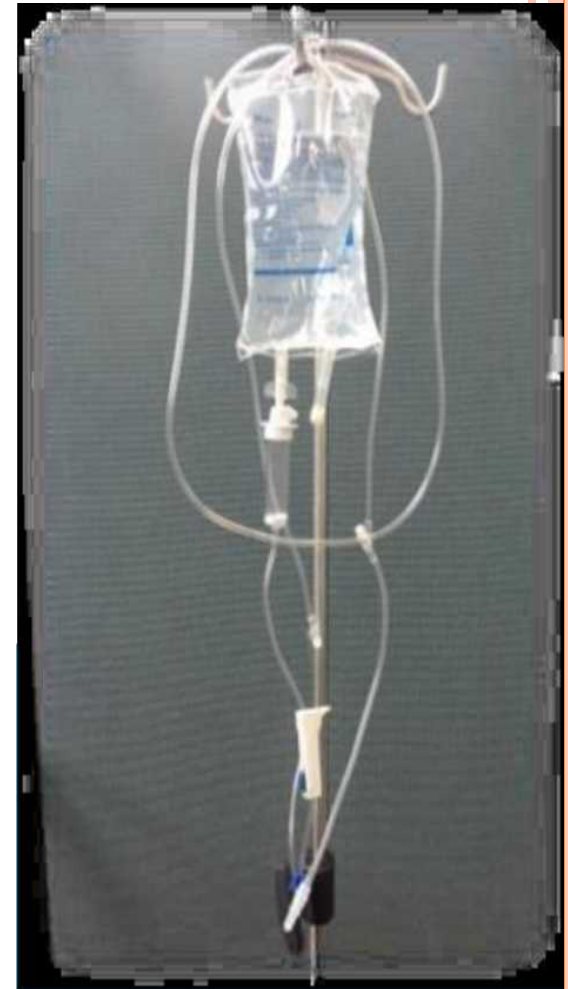


what is the difference between a Micro drip and a macro drip?

Micro drip	Macro drip
1 . micro drip tubing is used for people who are receiving smaller amounts of IV medication .	1 -Macro drip tubing is much larger , so is better for delivering larger doses of fluid.
2-Micro drip tubing typically delivers 1 ML in 60 drops . This makes it ideal when dealing with more precise drip rates.	2-Macro drip tubing can deliver between 10 drips to infuse 1 ML .
3-Micro drip tubing is typically used for medications that require greater care .	3-This type of tubing is used when rapidly infusing large amounts of fluid such as saline solution .

IV fluid administration setup

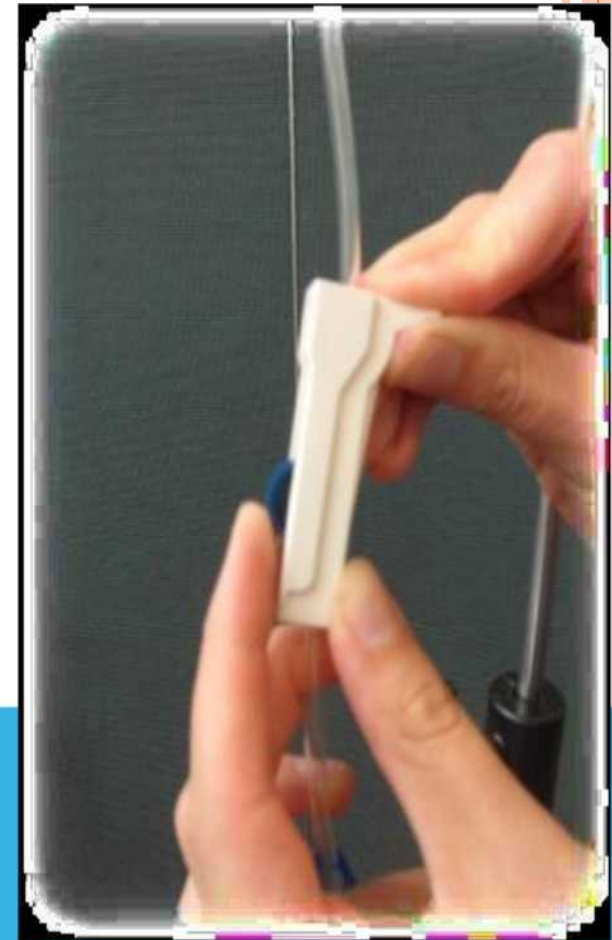
- 1 -Make sure the **spike** is inserted
- 2- **Hang the fluid bag** on a drip stand(intravenous poles)
- 3 -Squeeze the transparent **drip chamber** until there is about **1.5 cm** of fluid in the



IV FLUID ADMINISTRATONSETUP

4 -Start the flow of fluid through the giving set by slowly rolling the wheel upwards

5-Run the fluid down the entire length of the giving set and out into a bucket. To prevent bubbles, run the fluid through slowly



IV FLUID ADMINISTRATONSETUP

6 -Stop the flow of fluid by
rolling the wheel down

7 -Connect the other end of the
iv set to the cannula



Any questions?

*Thank
You*