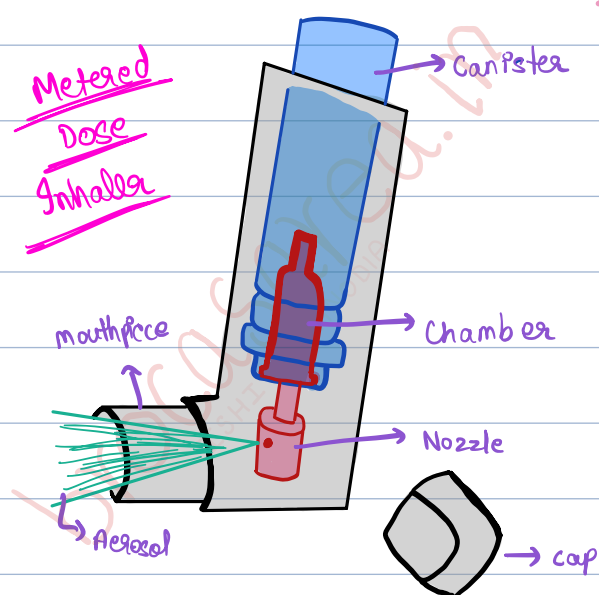
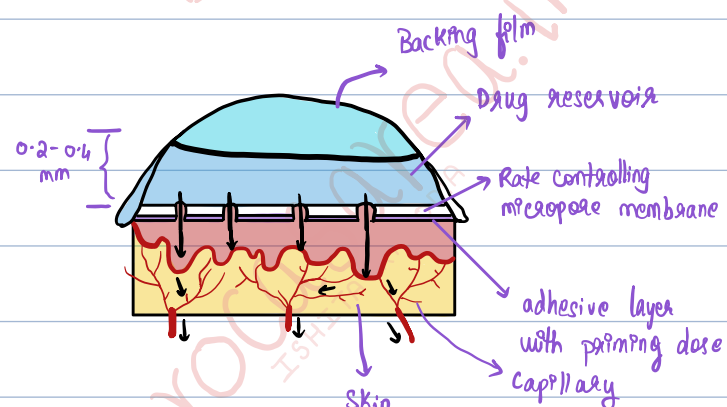


Transdermal Adhesive Patch: drug is incorporated into a polymer which is in turn bonded to an adhesive plaster.

- drug is delivered at the skin surface by diffusion (for percutaneous absorption into circulation)
- provide steady & smooth plasma concentration of drug for 1-3 days
- Nitroderm - TTS (nitroglycerin) • Estraderm - TTS (estradiol)
- Nicotinel - TTS (nicotine)

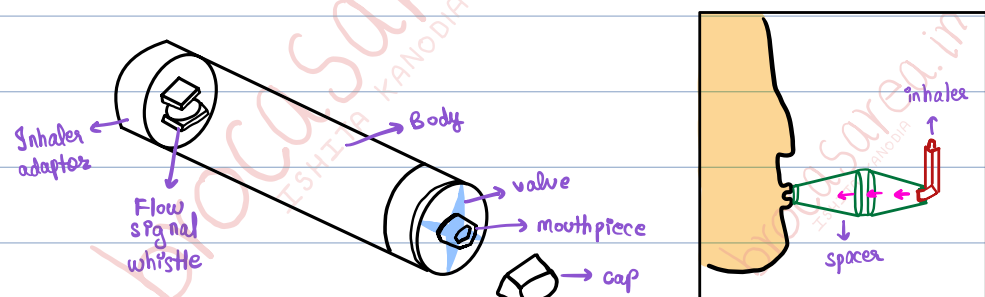


Vacutainer Tubes:

Colour	Anticoagulant	Use
Red	No anticoagulant	Serological examination in biochemistry
White	Sodium fluoride	Glucose estimation
Purple	EDTA	Haematological examination like complete hemogram, ESR
Blue	3.2% sodium citrate	Coagulation studies like PT, APTT
Green	Heparin	Bone marrow studies
Yellow	Citrate	Blood culture
Pink	(K ₂) EDTA	Blood bank tests, Blood typing, ABO grouping, etc.

Spacer Device: infants & young children often have difficulty in coordinating the use of inhaler.

- ∴ spacer can be attached to an inhaler (a face mask may be attached to the spacer if necessary.)



Transdermal Patch:

- do not apply over bruised or damaged skin
- do not wear over skin folds or under tight clothing
- change site of application regularly
- Apply with clean, dry hands
- Clean & dry the area of application completely
- Remove the patch from the packet ; do not touch the drug side.
- Place on skin & press firmly ; rub the edges to seal

Metered Dose Inhaler:

- ① Remove the dust cap from the mouthpiece & shake the inhaler vigorously.
- ② Hold the inhaler vertically. Breathe out slowly & gently until the lungs are comfortably empty. Tilt the head back. Close the lips tightly around the mouthpiece.
- ③ Start breathing slowly & press the metal canister down firmly.
- ④ Continue breathing in slowly & steadily until the lungs are full.
- ⑤ Remove the inhaler from the mouth while holding the breath as long as possible ; wait for at least one minute before puffing the next dose.

Aspiration From a Vial :

- Wash your hands
- Disinfect the top of the vial
- Use a syringe with volume of twice the required amount of drug/soln. & add the needle
- Suck up as much air as the amount of solution needed to aspirate
- Insert needle into the top of the vial & turn upside down
- Pump air into the vial [creating pressure]
- Aspirate the required amount of solution & 0.1 mL extra. Make sure that the tip of the needle is below the fluid's free surface
- Pull out the needle
- Remove possible air from the syringe
- Clean up, dispose of waste safely, wash your hands.

Eye Drops :

- Wash your hands
- Do not touch the dropper opening
- Ask patient to look upwards
- Pull the lower eyelid down to make a gutter.
- Bring the dropper as close to the gutter as possible without touching it or the eye
- Apply the prescribed amount of drops in the gutter
- Close the eye for about 2 min. Do not shut the eye too tight
- Excess fluid can be removed with a tissue.
- If more than one kind of eye drop is used, wait at least 5 minutes before applying the next.

When giving eye drops to children :

- Let the child lie back with head straight
- The child's eyes should be closed
- Drop the amount of drops prescribed into the corner of the eye.
- Keep the head straight
- Remove excess fluid.

Nasal Drops :

- Blow the nose
- Ask the subject to sit down & tilt head backwards strongly or lie down with a pillow under the shoulders (head must be straight)
- Insert the dropper 1cm into the nostril
- Apply the amount of drops prescribed
- Immediately, tilt the head forwards strongly (head between knees)
- Sit up after a few seconds, the drops will then drip into the pharynx
- Repeat the procedure for the other nostril if necessary
- Rinse the dropper with boiled water

Nasal Spray :

- Blow the nose
- Sit with head tilted slightly forward
- Shake the spray
- Insert the tip in one nostril
- Close the other nostril & mouth
- Spray by squeezing the vial & ask the subject to sniff slowly
- Remove the tip from the nose & bend the head forwards strongly (head between knees)
- Sit up after a few seconds; the spray will drip down the pharynx
- Breathe through the mouth
- Rinse the tip with boiled water.

Suppository:

- Wash your hands
- Remove the covering (unless too soft)
- If the suppository is too soft, let it harden first by cooling it (fridge / under cool water) & then remove the covering
- Remove possible sharp rims by warming in the hand
- Moisten the suppository with cold water
- Ask subject to lie on the side & pull up the knees
- Gently insert suppository, rounded end first, into the back passage.
- Remain lying down for several minutes
- Wash your hands
- Try not to have a bowel movement during the first hour.

Ear Drops:

- Warm the ear drops by keeping them in the hand / armpit for a few mins.
(Do not use hot tap water)
- Tilt head sideways or lie on one side with the ear upward
- Gently pull the lobe to expose the ear canal.
- Apply the amount of drops prescribed
- Wait for five minutes before turning to the other side
- Use cotton wool to close the ear canal after applying the drops only if the manufacturer has explicitly recommended this.
- Ear drops should not burn or sting longer than a few minutes.