



SNS COLLEGE OF ALLIED HEALTH SCIENCES
SNS Kalvi Nagar, Coimbatore - 35
Affiliated to Dr MGR Medical University, Chennai



DEPARTMENT OF CARDIOPULMONARY PERFUSION CARE
TECHNOLOGY

COURSE NAME : INTRODUCTION TO SURGERY

3RD YEAR

TOPIC : NECK LINE SET

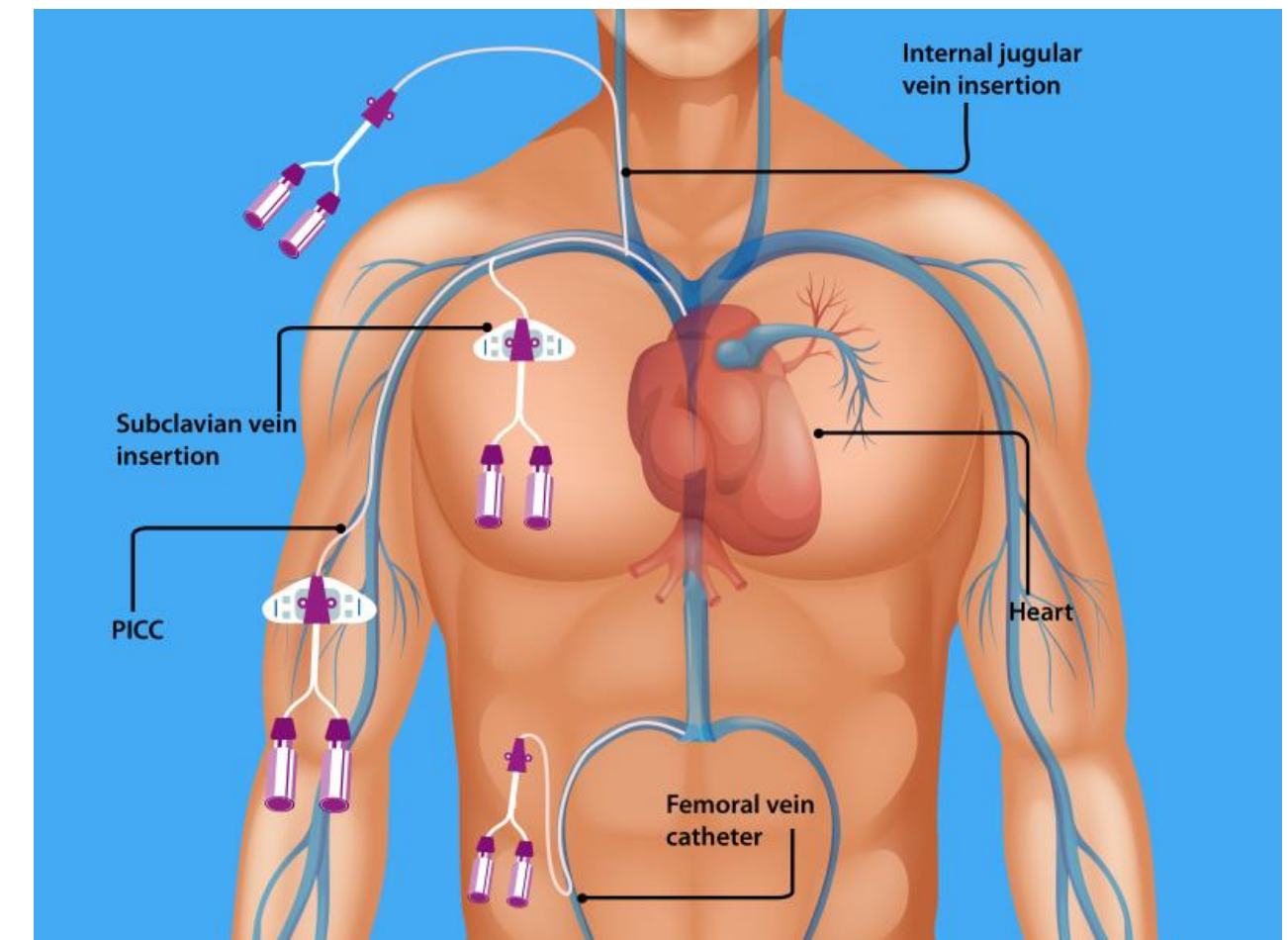
MS. KRIPA/LECTURER/SNSCAHS

DEFINITION

- Central line is a procedure in which a catheter placed on large veins (SVC) and Femoral vein.
- It's also called as **CENTRAL VENOUS CATHETER, CENTRAL LINE, NECK LINE** or **ACCESS LINE'S**.

Sites :

1. Internal Jugular vein (neck)
2. Subclavian vein , axillary vein (Chest)
3. Femoral vein (Groin)
4. Peripherally inserted central catheter





INDICATION



1. To measure central venous pressure
2. For Drug administration
3. To collect blood samples
4. For fluid administration
5. Long term IV antibiotics
6. Long term pain medications
7. Chemotherapy



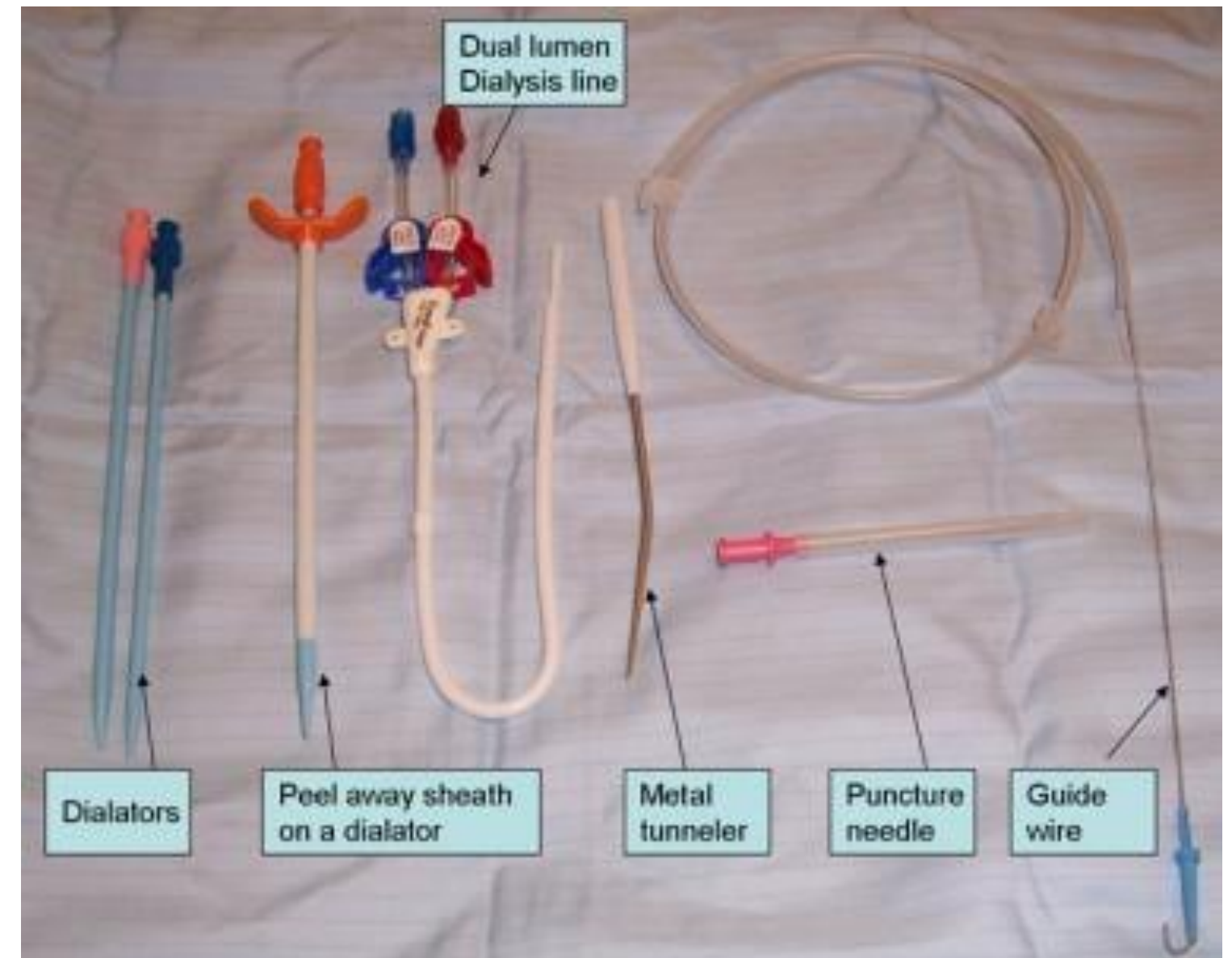
TYPES

1. Tunneled catheter
2. Non – Tunneled catheter

Based on lumens: **Single, Double, Triple.**

Indication for Tunneled catheter

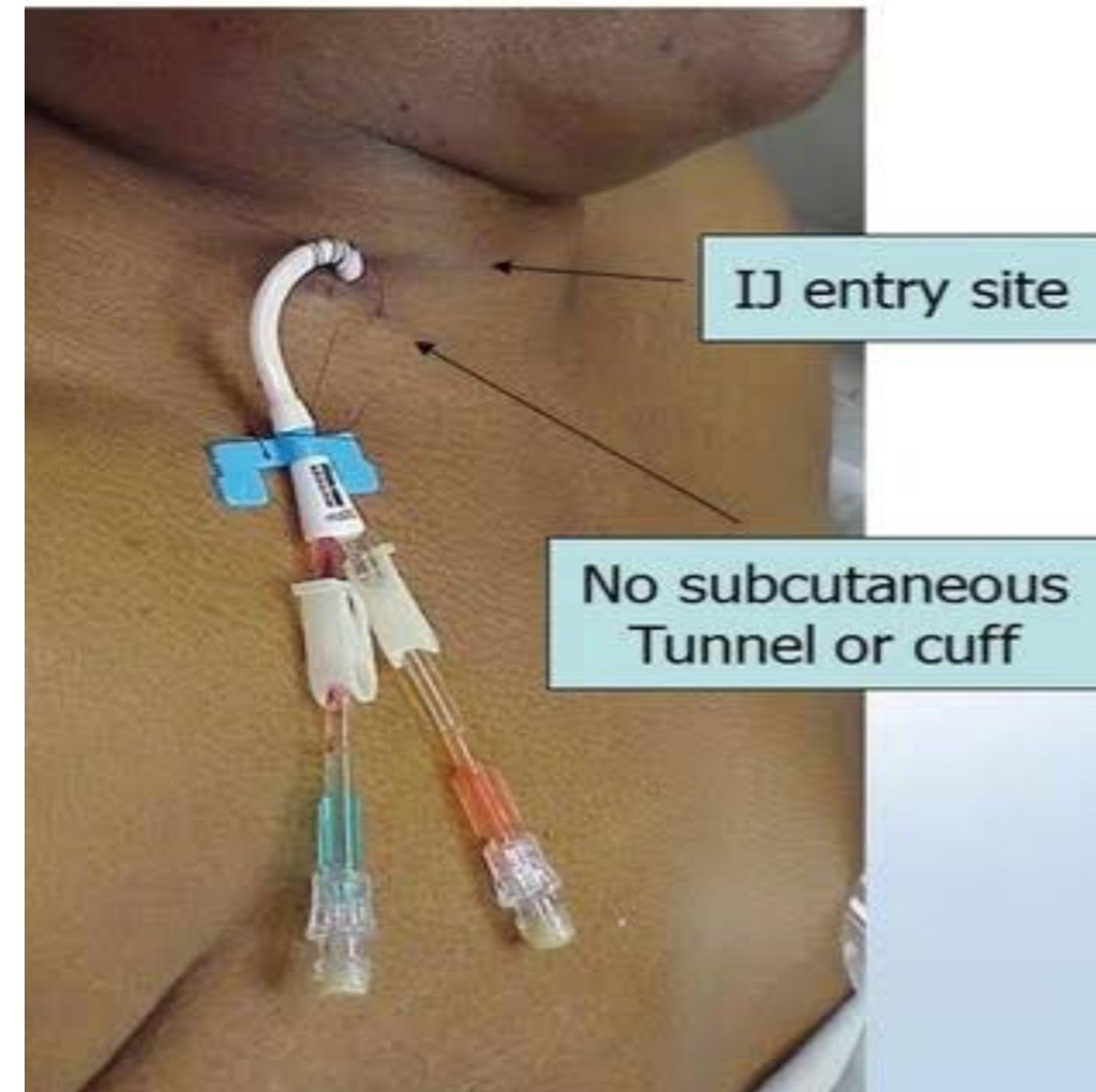
- Chemotherapy
- Nutrition
- Fluids administration
- Collecting Blood samples
- Long term purpose – used under the skin (mostly IJV or Femoral vein)



Indication for Non - Tunneled catheter

- Hemodialysis
- Renal Replacement Therapy

Non-tunneled



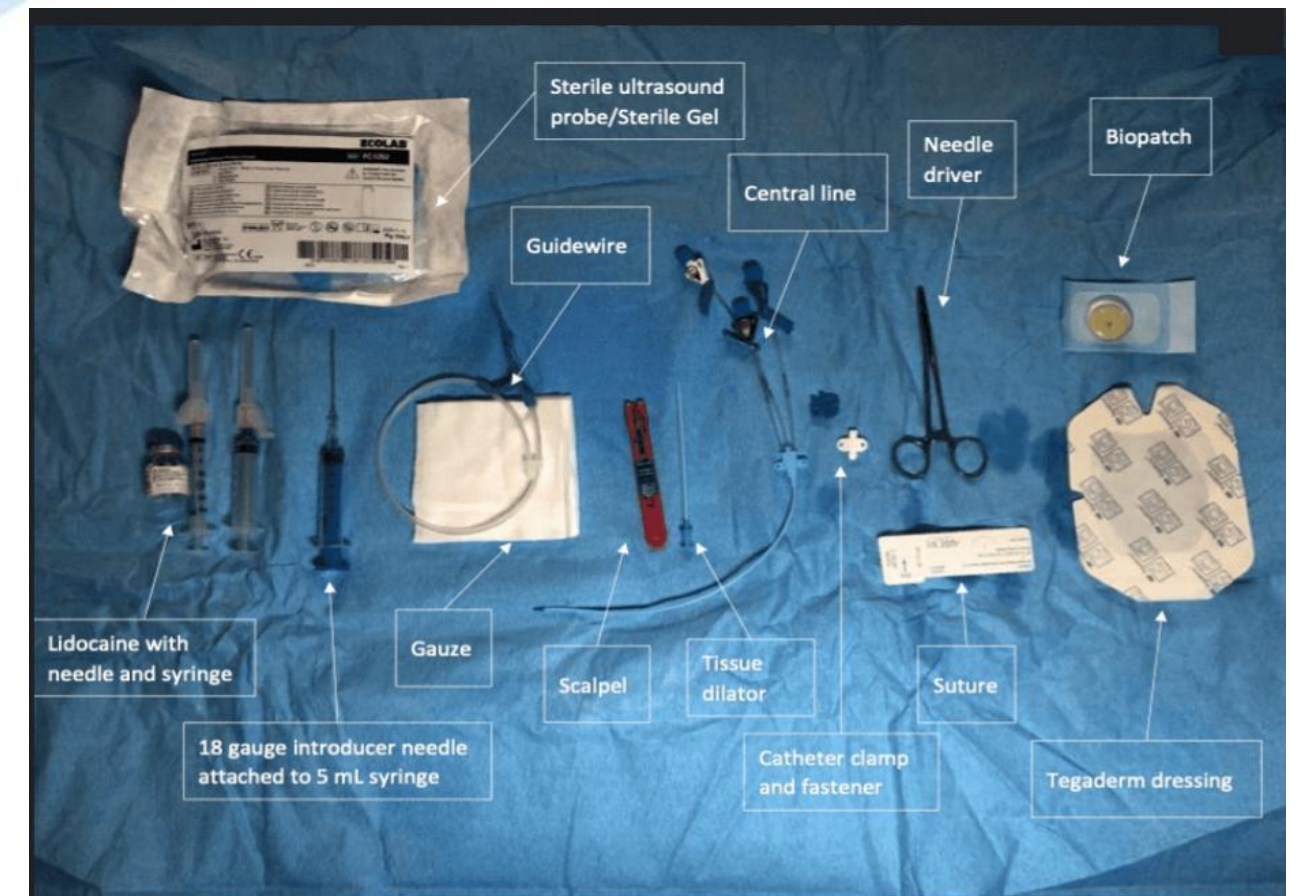


NECK LINE CATHETER SET



Consist of :

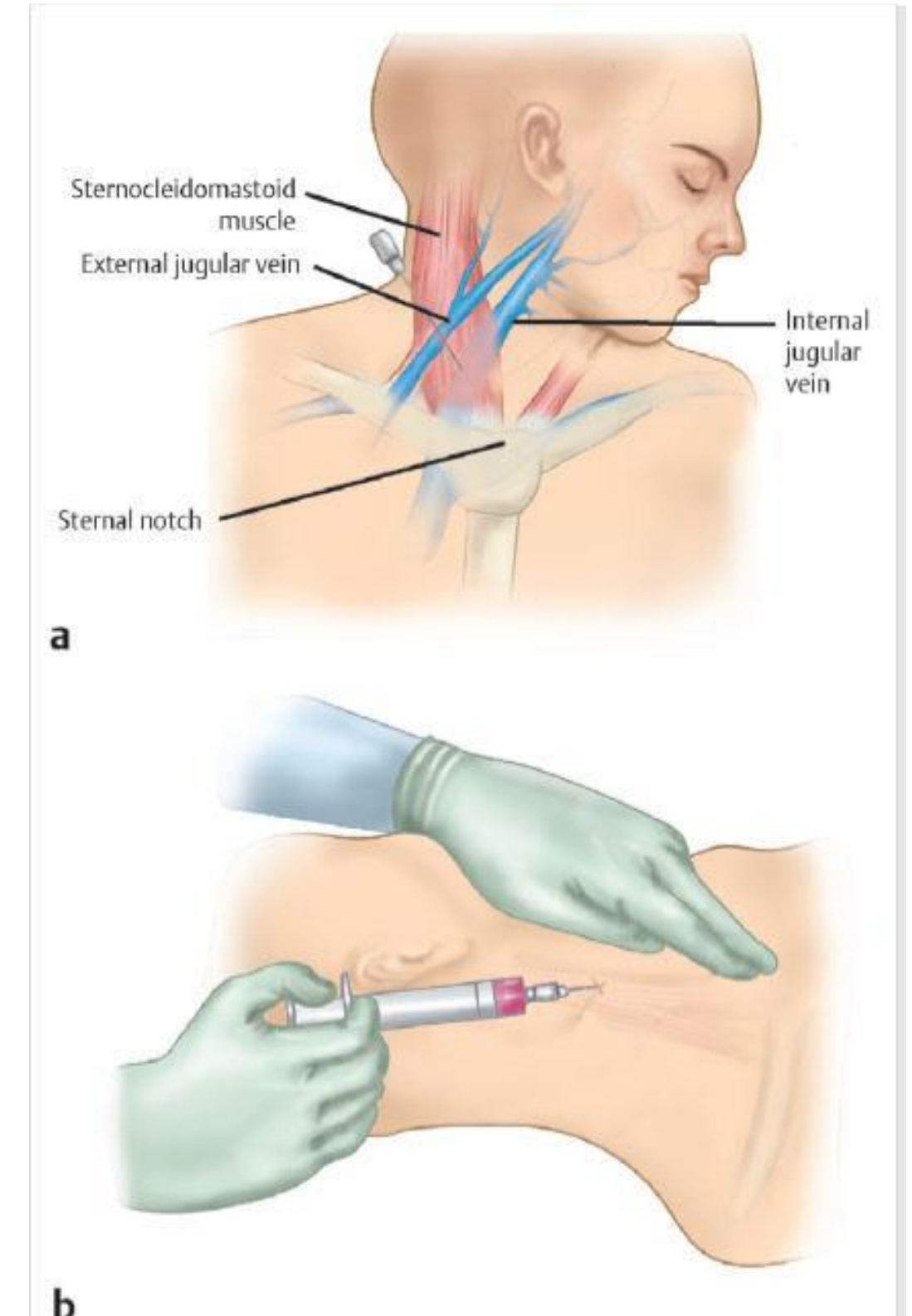
1. Sterile trolley
2. Gloves
3. Gowns
4. Mask
5. Central line kit
6. Saline for flush
7. Chlorhexidine(aseptic solution)
8. Lignocaine (local anesthetic agent)
9. Suture material
10. Central line fixator
11. Gauze piece
12. Scalpel



PROCEDURE – SELDINGER TECHNIQUE

Preparation

- Patient Examination and education
- Patients Consent form
- Set-up sterile trolley
- consent for infection, bleeding and Hematoma.
- place the patient in head down position by head facing away from the site of insertion





NECK LINE PROCEDURE

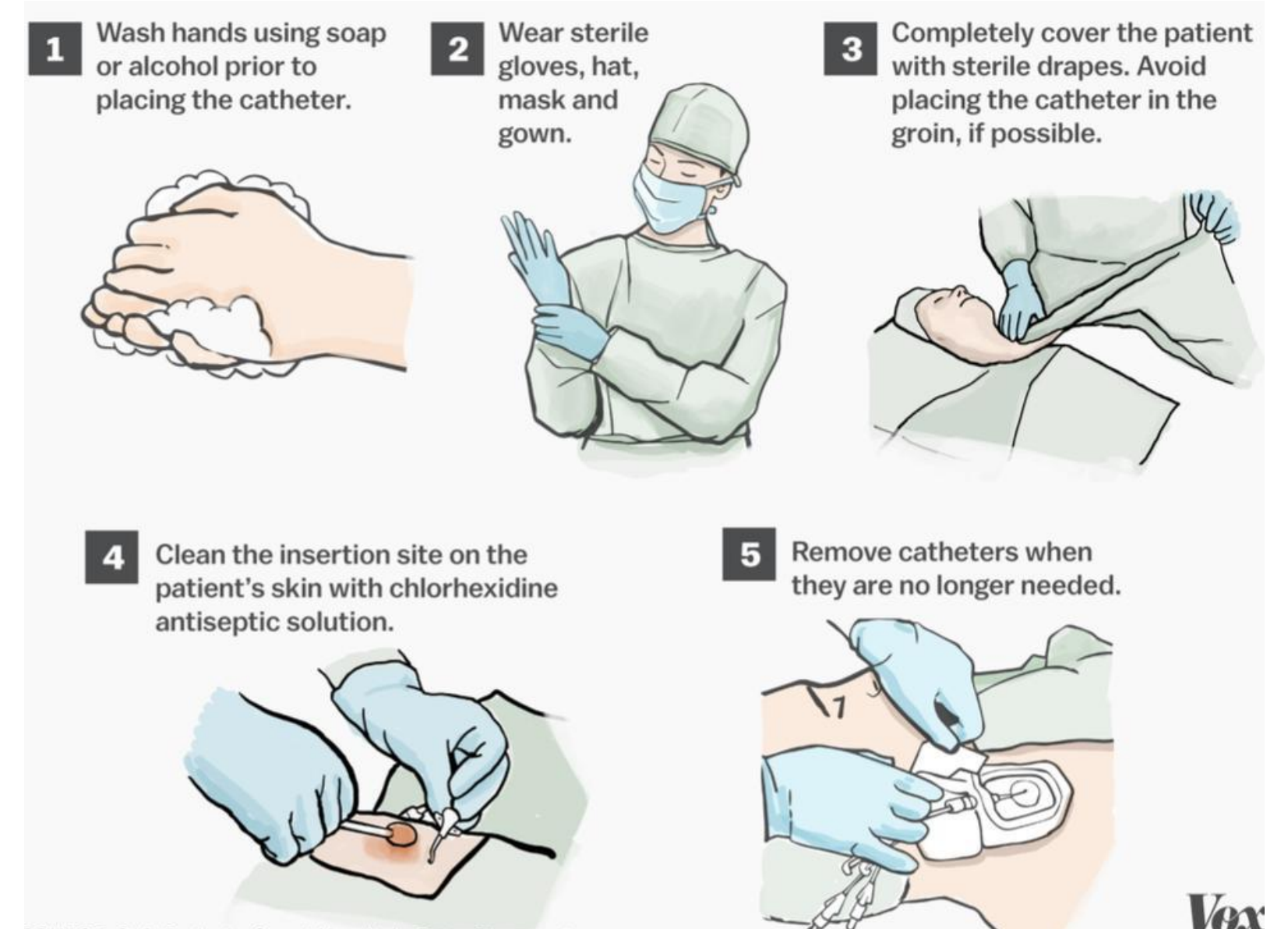


Procedure

- Wash the hand were gloves and gown.
- Clean the insertion area using gauze.
- Conform the location
- Apply lignocaine on the cutaneous surface.
- With help of ultrasound probe , SELDINGER attached to the syringe and inserted into IJV.
- If blood passes freely, remove syringe and inserted the wire.
- Seldinger wire should Move freely.
- Remove the needle, ensure the wire stays in the vein.
- Use scalpel to make a small incision approximately 3mm.

Continued

- Should not damage the wire.
- Pass the dilator over the wire.
- Once the central line is placed, remove the guide wire.
- Aspirate and flush all the lumens with saline and apply the lumen cap.
- Secure the line with suture.
- Dressing should be done.





DOCUMENT



- Name of the procedure
- Insertion site
- Insertion time
- Number of lumens
- Insertion by whom and approval sign
- Any anticipated event's.



Reference



- www.slideshare.net
- www.vascularwellness.com
- General surgery books



Thank you