



# Injectiions

Subcutaneous

Intramuscular

Medications

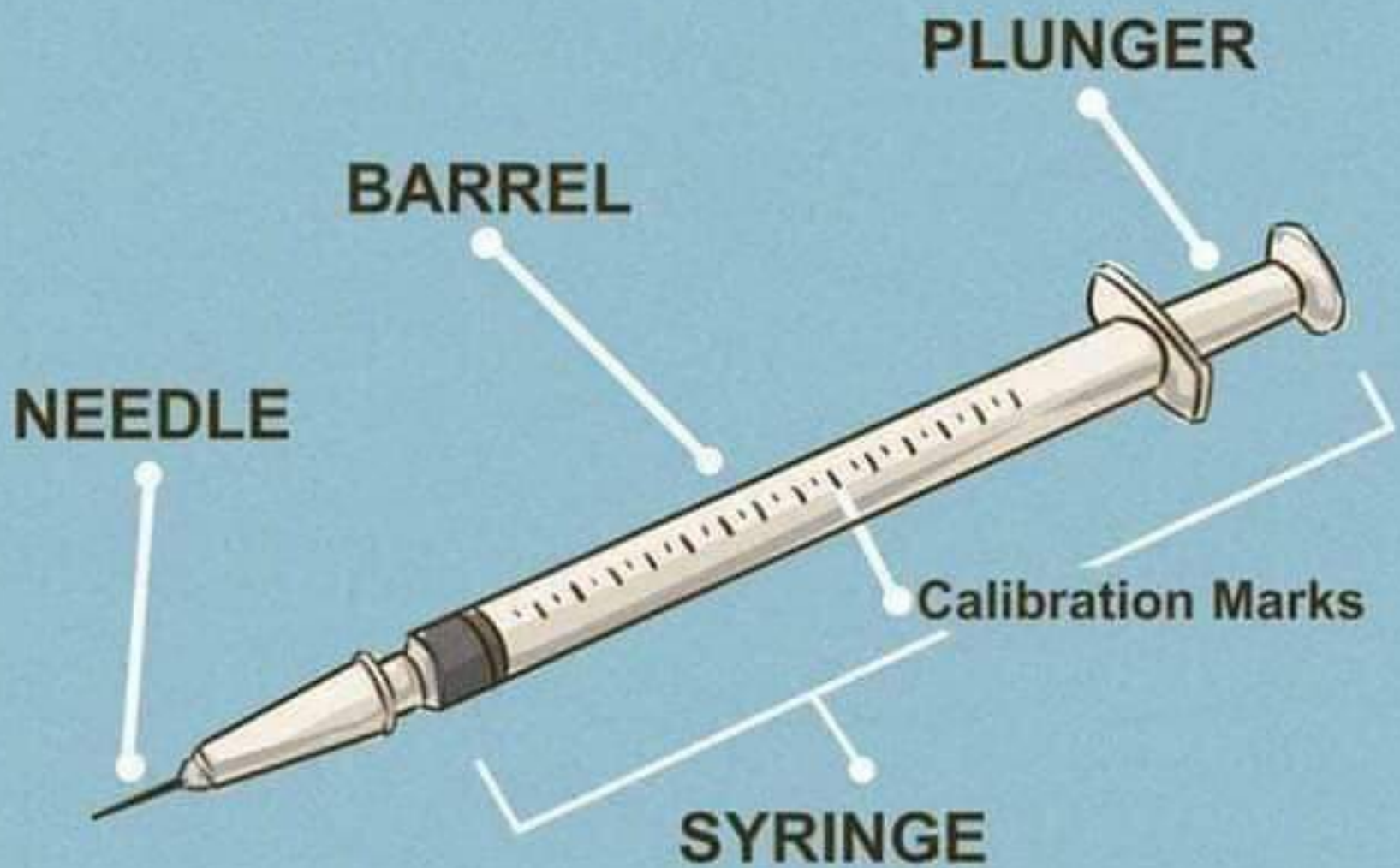
# Subcutaneous Injections

- Medications absorbed in the fat
- Administered in areas of fat in the body
- Size gauge: Subcutaneous range = 25-27
- Needle length: 3/8-5/8 inch
- No airlock for subcutaneous! Only exception is Lovenox and Arixtra.
- How to admin? Pinch up the skin and inject at a 45 degree angle

# Subcutaneous Injections

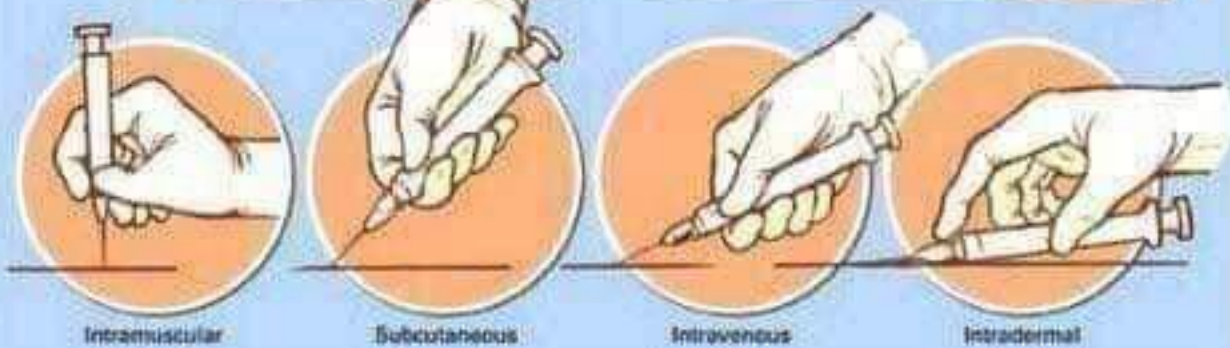
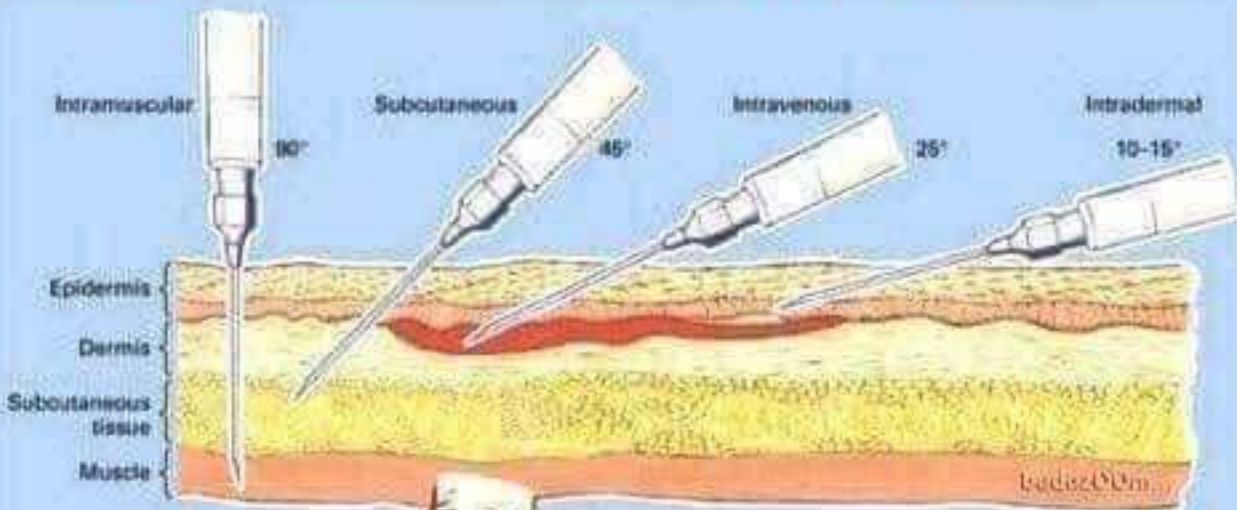
- Heparin, Lovenox, Insulin, Arixtra- 90 degree angle
- Aspirate and massage for subcutaneous injections *except* Heparin, Lovenox, Insulin, Arixtra.
- Two handed versus One handed technique



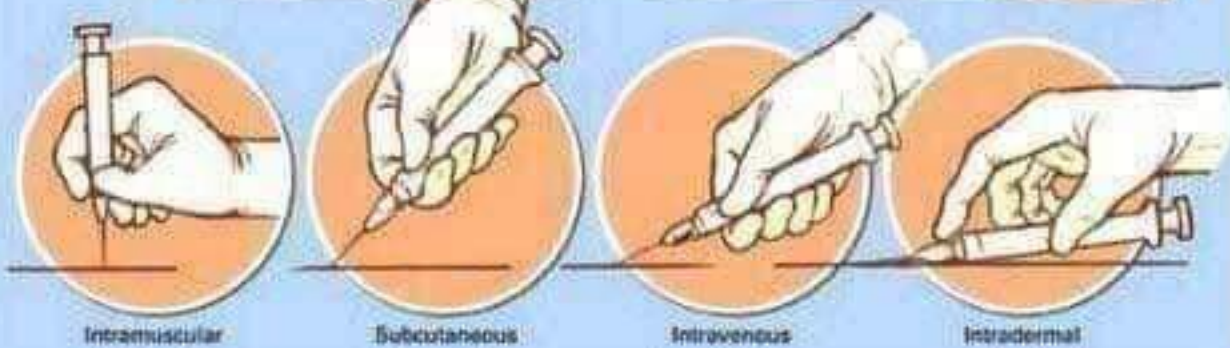
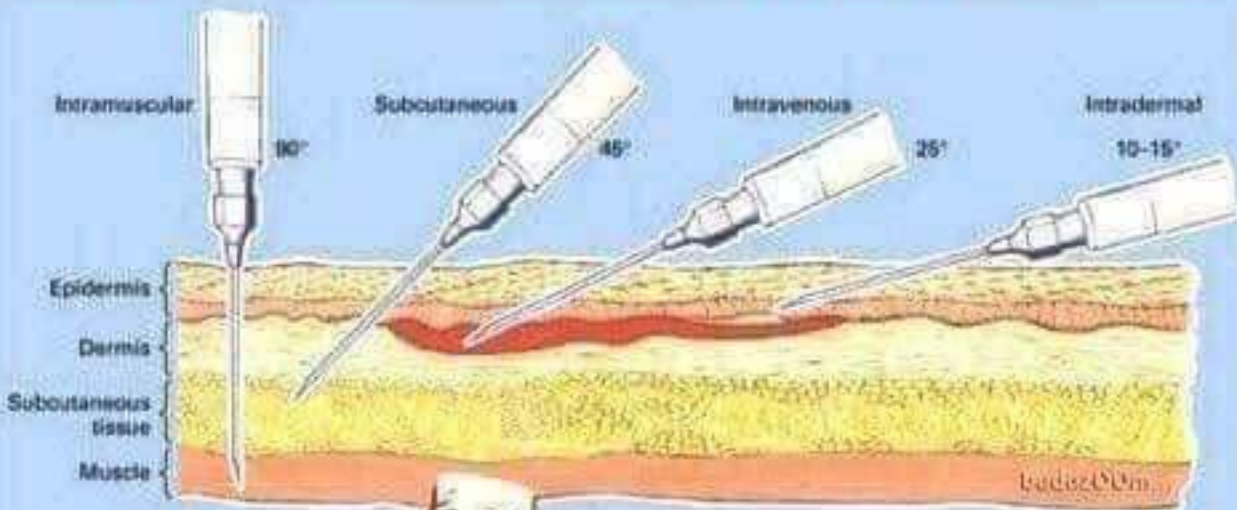


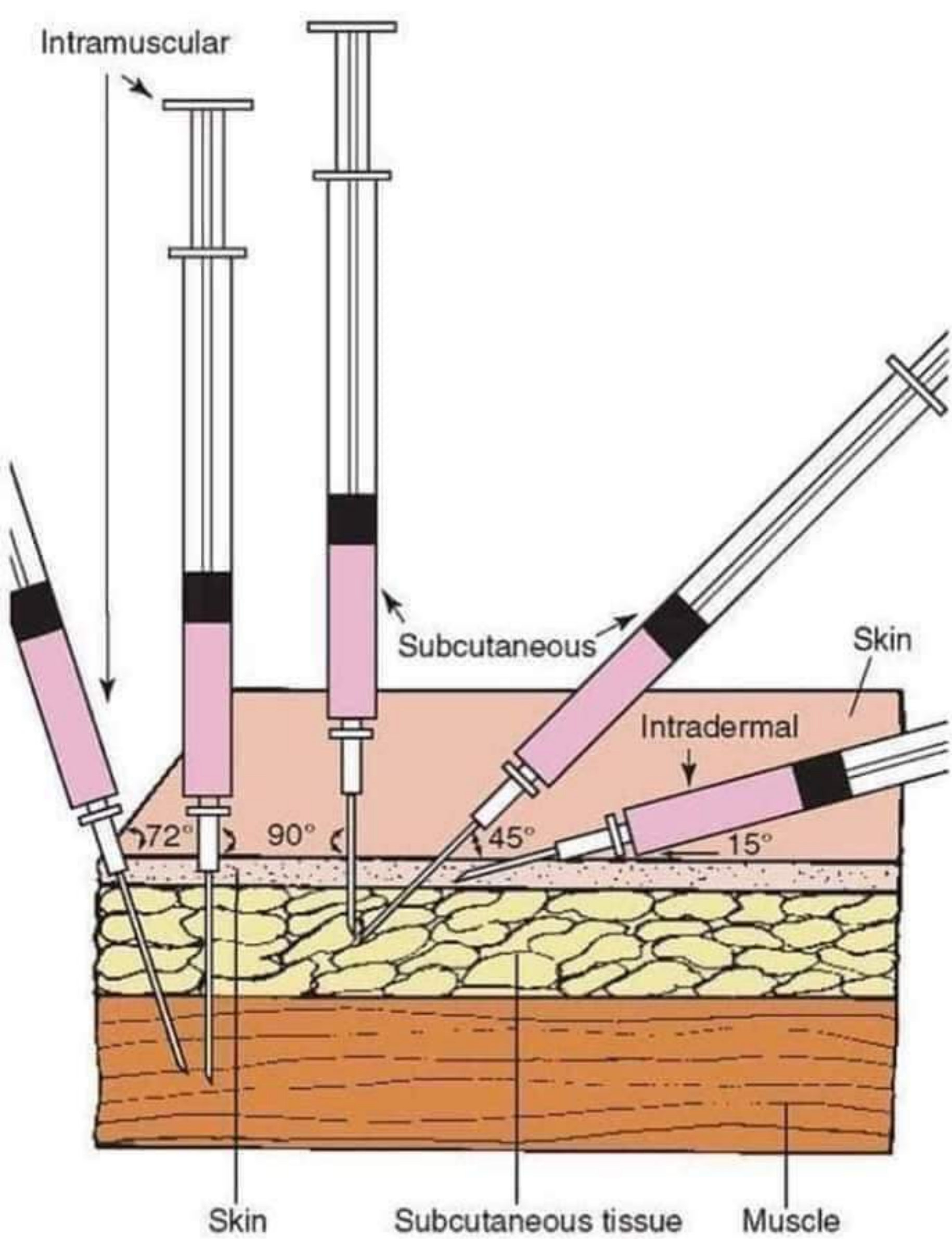


# Angles for inserting injections



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# How to Give an Intramuscular Shot



1. Use an alcohol swab to clean the skin where you will give the shot.



2. Hold the muscle firmly and insert the needle into the muscle at a 90° angle (straight up and down) with a quick firm motion.



3. After you insert the needle completely, release your grasp of the muscle.



4. Gently pull back on the plunger of the syringe to check for blood. (If blood appears when you pull back on the plunger, withdraw the needle and syringe and gently press the alcohol swab on the injection site. Start over with a fresh needle.)



5. If no blood appears, inject all of the solution by gently and steadily pushing down the plunger.



6. Withdraw the needle and syringe and press an alcohol swab gently on the spot where the shot was given.



# Intramuscular Injections

- Medications absorbed in the muscle
- Administered in...
  - Deltoid
  - Vastus lateralis (front of thighs)
  - Ventrogluteal
  - Dorsogluteal
- Size gauge: IM range = 18-22
- Needle length: 1-1 1/2 inch
- Maximum dose: 3 mL

# Intramuscular Injections

- IM requires a 0.2-0.3 mL airlock
- How to admin? Hold skin taut and inject at a 90 degree angle
- Aspirate and massage all IM injections



# Injection angles

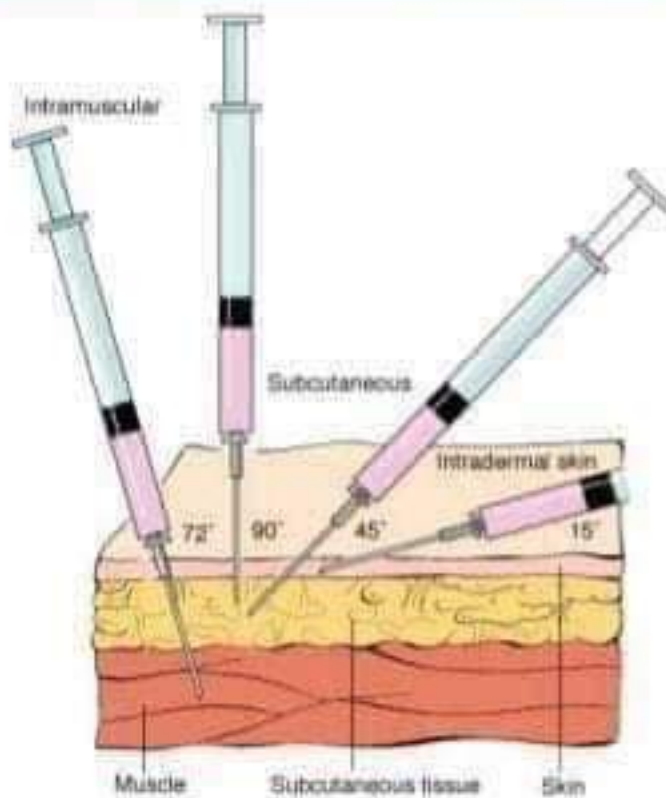


Figure 29-11 Comparison of the angles of insertion for intramuscular, subcutaneous, and intradermal injections.



# Intramuscular Injections

- **Z-track method:**
  - Requires the one-handed method
  - Use your non-dominant hand to gently pull skin to one side.
  - Release skin only after needle is withdrawn

# Z-track method

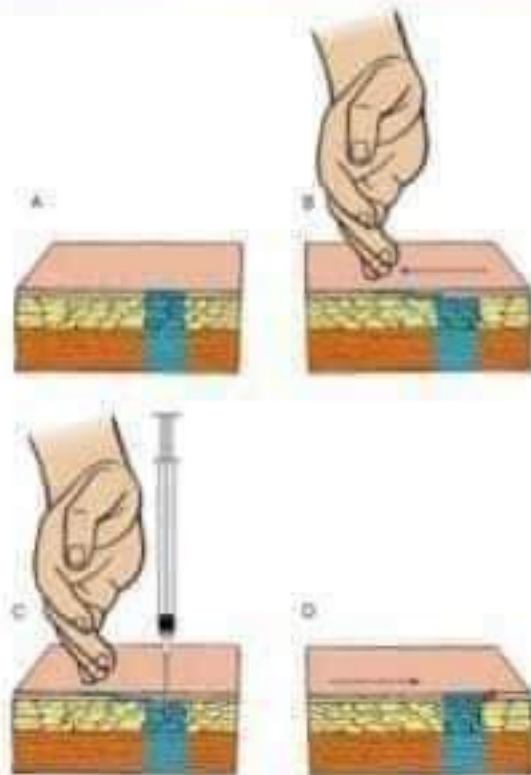


Figure 29-12 The Z-track or zigzag technique is recommended for intramuscular injections. (A) Normal skin and tissues. (B) Moving the skin to one side. (C) Needle is inserted at a 90-degree angle, and the nurse aspirates for blood. (D) Once the needle is withdrawn, displaced tissue is allowed to return to its normal position, preventing the solution from escaping from the muscle tissue.

# Basic Injection Techniques

- Tell pt. what to expect
- Do not drill
- Anchor heel of your hand on pt's hip, leg, arm so you can move with pt
- Do not recap used needle
- Ampule
  - Use an alcohol pad to open.
  - Use a filter needle
  - No air into ampule.



(Action 2: Snapping open of ampule. (Photo by Web Meds))



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