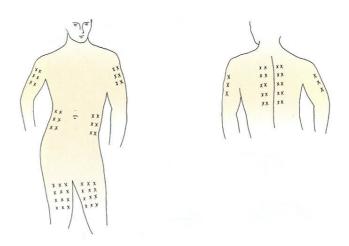
Subcutaneous Injection

Introduction:

A subcutaneous injection is administered more deeply than an intradermal injection. Medication is instilled between the skin and muscle and absorbed fairly rapidly: the medication usually begins acting within a half-hour of administration. The volume of a subcutaneous injection is usually up to 1 ml. the subcutaneous route is commonly used to administer insulin and heparin.

Injection Sites:

The site for giving a subcutaneous injection include the upper arm, thigh, abdomen, and back.



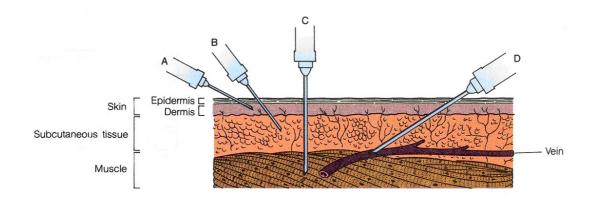
Equipment:

- Vial or ampule of medication
- Alcohol swab
- Tuberculin syringe
- 25- to 27-gauge needle measuring a half-inch in length
- Clean gloves

Technique:

- 1. Check the medical orders.
- 2. Obtain clean gloves, appropriate syringe and needle, and alcohol swabs.
- 3. Prepare the syringe with the medication.
- 4. Wash your hands and wear gloves.
- 5. Read the name on the patient's identification band.
- 6. Select and prepare an appropriate site by cleansing it with an alcohol swab.

- 7. Allow the skin to dry.
- 8. Bunch the skin at the site or spread it taut.
- 9. Pierce the skin at a 45° or 90° angle of entry. (To reach subcutaneous tissue in a heavy person, a half-inch needle is inserted at a 90° angle. For thin or average size patients, the needle is inserted at a 45° angle).
- 10. Release the tissue once the needle is inserted and use the hand to support the syringe at its hub.
- 11. Pull back gently on the plunger with a free hand and observe for blood in the barrel.
- 12. Inject the medication by pushing on the plunger if there is no blood after aspiration.
- 13. Withdraw the needle quickly while applying pressure against the medication site.
- 14. Massage the site, unless contraindicated.
- 15. Deposit the uncapped needle and syringe.
- 16. Remove your gloves and wash your hands.
- 17. Assess the patient's condition at least 30 minutes after giving the injection.



Injection routes. (A) intradermal, (B) subcutaneous, (C) intramuscular, (D) intravenous.

Checklist for Subcutaneous Injection

- 1. Mentions hand washing
- 2. Assembles correct equipment in the tray
- 3. Introduces oneself to the patient and checks patient's name
- 4. Explains procedure to the patient and gets verbal consent
- 5. Selects an appropriate site
- 6. Wears gloves
- 7. Uses alcohol swab to clean skin
- 8. Bunches the skin at the site or spread it taut
- 9. Pierces the skin at a 45° or 90° angle of entry
- 10. Releases the tissue once the needle is inserted and use the hand to support the syringe at its hub
- 11. Pulls back gently on the plunger with a free hand and observe for blood in the barrel
- 12. Injects the medication by pushing on the plunger if there is no blood after aspiration
- 13. Withdraws the needle quickly while applying pressure against the medication site
- 14. Massages the site, unless contraindicated
- 15. Deposits the uncapped needle and syringe
- 16. Removes gloves and washes hands.
- 17. Assesses the patient's condition at least 30 minutes after giving the injection
- 18. Thanks and listens to the patient's questions