

Mosby's Nursing Video Skills

Procedure Guideline for Administering a Subcutaneous Injection

1. Gather the necessary equipment and supplies.
2. Before administering a subcutaneous injection, perform hand hygiene and prepare the medication using aseptic technique.
3. Check the medication label twice against the medication administration record (MAR).
4. Take the medication to the patient at the correct time, according to your agency's policy. Give time-critical medications, such as "stat" and "now" doses, at the exact time specified in the order.
5. Perform hand hygiene, ensure patient privacy and introduce yourself to the patient.
6. Identify the patient using two identifiers according to agency policy. Compare these identifiers with the MAR or medical record. Ask the patient if he has any allergies.
7. Access the electronic MAR.
8. At the patient's bedside, again compare the MAR or computer printout with the names of the medications on the medication labels and with the patient's name.
9. Discuss the purpose of each medication with the patient, including its action and possible adverse effects. Allow the patient to ask questions. Find out where the last injection was given by checking the MAR and/or asking the patient. Determine which site you will use. Tell the patient that the injection may cause a slight burning or stinging sensation.
10. Shift the patient's bed linen to expose only the potential injection site and surrounding areas.
11. Select an injection site, and inspect the skin for bruises, inflammation, or edema. Choose another site if bruising or signs of infection are evident.
12. The best sites for a subcutaneous injection include the outer aspect of the upper arm, the abdomen from below the costal margin to the iliac crest and the anterior aspect of the thigh. These areas are easily accessible and large enough to allow for multiple injections.
13. Palpate the site. Select a new site if you find a mass or tenderness. Be sure the needle is the correct size by grasping a skinfold of tissue at the injection site with your thumb and forefinger. Measure the fold from top to bottom. Make sure the needle is one-half this length.
 - A. When administering insulin or heparin, abdominal injection sites are preferred, followed by injection sites on the thigh.
 - B. When administering low-molecular weight heparin (LMWH) subcutaneously, choose a site at least 5 cm (2 inches) to the right or left of the umbilicus. If an abdominal area is not available, look for a site on the thigh.
 - C. Systematically rotate insulin injection sites within one anatomical region, such as the abdomen or thigh.
14. Help the patient into a comfortable position. Have the patient relax the area of the injection site.
15. Apply clean gloves. Clean the site with an antiseptic swab, wiping in a circular pattern from the center of the site outward about 5 cm (2 inches).
16. Hold a gauze pad between the third and fourth fingers of your nondominant hand.
17. Remove the needle cap or protective sheath on the syringe by pulling it straight off.
18. Hold the syringe between the thumb and forefinger of your dominant hand, as though you were holding a dart.
19. Administer the injection:

- A. For an average-size patient, hold the skin across the injection site or pinch a fold of skin with your nondominant hand.
 - B. Insert the needle quickly and firmly at a 45- to 90-degree angle. Release the skin if it is pinched. Rest your nondominant hand on the patient and use it to stabilize the syringe. When using an injection pen or giving heparin, continue to pinch the skin during the injection.
 - C. For an obese patient, pinch the skin at the site and inject the needle at a 90-degree angle below the tissue fold.
 - D. Move your dominant hand to the end of the plunger and slowly inject the medication over several seconds. Retain your grasp on the syringe to keep it still.
 - E. With the thumb and middle finger of your nondominant hand, pull the skin taut, quickly withdraw the needle and place a swab or gauze pad on the site and apply gentle pressure.
 - F. Do not massage the site. If heparin was administered, hold a gauze pad on the site for 30 to 60 seconds.
- 20. Activate the needle safety and help the patient into a comfortable position.
 - 21. Discard the needle and syringe in a puncture-proof, leak-proof container.
 - 22. Dispose of used supplies. Remove and discard your gloves, and perform hand hygiene.
 - 23. Document the injection immediately in the MAR including the medication name, dose given and the site in which it was injected.
 - 24. As part of your follow up care, stay with the patient for several minutes, observing for any allergic reaction.
 - 25. Place toiletries and personal items within reach.
 - 26. Place the call light within easy reach, and make sure the patient knows how to use it to summon assistance.
 - 27. To ensure the patient's safety, raise the appropriate number of side rails and lower the bed to the lowest position.
 - 28. Leave the patient's room tidy.
 - 29. Return to the patient's room in 15-30 minutes to see if the patient has any acute pain, tingling, burning or numbness at the injection site.