Giving Lovenox or Heparin by Subcutaneous Injection

A subcutaneous injection, also called a sub Q or SQ shot, is one that is given into the layers of skin and fat on top of the muscle.

This handout will show the steps for giving blood thinner medicines, either Lovenox or heparin by a subcutaneous injection. The generic name for Lovenox is enoxaparin. These medicines most often come in prefilled syringes. If you do not get prefilled syringes, go to the end of the handout for the steps to fill a syringe.

Things to Know

- **If the needle bends or it is bent when you remove the needle cover,** you should not use it for an injection because it may break off in the skin. Do not try to straighten the needle. Start over with a new needle or needle and syringe if needed.

- Store the medicine as you are directed. Some medicines need to be stored in the refrigerator or away from light.

- Keep your medicine, syringes, needles and old needles and syringes away from children and pets.

- You can buy a needle disposal container at the drug store or you can use an empty heavy plastic bleach or detergent bottle with a lid. Be sure to keep the container out of the reach of children and pets.

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• Ask your pharmacist or nurse how you should throw away your container of used needles and syringes. You can also check with your garbage collector.

• **If you are the caregiver** giving a shot, you may want to wear gloves to avoid any contact with blood.

**Select a Site**

• For Lovenox or heparin, give the injection into the sides of the abdomen or stomach and around your waist towards the back, as shown in the picture. If you are not able to use those sites, use the front and side of the upper legs.

• Use a different spot for each injection in a given area. For example, you may give the medicine on the left side of your abdomen. Then you use the right side of your abdomen for the shot the next day.

• Stay 1 inch away from any scar and stay 2 inches away from the navel. Scars will not absorb the medicine.

• Do not use an area that is bruised, swollen or tender.

**Giving the Injection**

1. Wash your hands well with soap and warm water or use alcohol based hand sanitizer.

2. Clean your skin site with an alcohol pad. Let the alcohol dry. Do not fan or blow on it to dry it faster because you will add germs back on the skin.
3. Pick up the prefilled syringe and check the label to be sure it is the right medicine. Carefully remove the needle cover.

4. For **Lovenox** and **heparin**, you should **not remove the air bubbles**, unless you need to adjust your dose. The air bubble helps to be sure you get all of the medicine out of the syringe when it is injected. The air will not harm you.

5. Hold the syringe like a dart and gently pinch up the skin at the site.

6. With a quick motion, push the needle straight into the skin.

7. If you are thin or you are told to keep the skin pinched, keep the skin pinched up while you inject. Otherwise, let go of the skin.

8. Inject the medicine slowly, over 20 to 30 seconds, by pushing in the plunger. The slower injection rate can reduce bruising.

9. Leave the needle in place for about 10 seconds after the medicine is in the skin.

10. Remove the needle and quickly press the alcohol pad or your finger onto the site. **Do not rub the skin.** Rubbing can cause bruising. **Hold pressure on the site for a few seconds.** If you notice any bleeding or oozing, hold pressure on the site longer.
11. If your syringe has a needle shield, point the needle down and away from you and push on the plunger. You should hear a click as the shield comes down over the needle.

12. Put the used syringe and needle into a puncture proof container with a lid. Do not recap the needle.

13. Wash your hands well with soap and warm water or use alcohol based hand sanitizer.

14. Mark the date, time and site of your injection on the calendar or record sheet.

**If You Need to Fill the Syringe**

1. Wash your hands well with soap and warm water or use alcohol based hand sanitizer.

2. Get your supplies.
   - Syringe with needle
   - Alcohol pad
   - Bottle of medicine – Check the label to be sure it is the right medicine

3. Remove the plastic cap from the medicine bottle if it is a new bottle.

4. Roll the medicine bottle between your hands to mix it. Do not shake it because it could make too many bubbles.
5. Clean the top of the medicine bottle with an alcohol pad. Rub the top with the alcohol pad for 10 to 15 seconds and let it air dry.

6. Pick up the syringe. Pull back on the plunger and draw air into the syringe equal to the amount of medicine needed.

7. Take off the needle cover or cap. Put the needle into the middle of the top of the medicine bottle.

8. Push down on the plunger to inject the air into the bottle. This will make it easier to get the medicine out of the bottle.

9. With the needle still in the bottle, carefully turn the bottle upside down so the bottle is on top and the syringe is down in your hand. Support the needle so it does not bend.
10. With the needle in the medicine, pull back on the plunger to the amount ordered.

11. Check for any bubbles in the syringe. Tap the barrel of the syringe to move any bubbles toward the needle.

12. Push the plunger to push the air bubbles out of the syringe. You want to have the bubbles out to be sure you get the full dose of your medicine. Adjust the plunger to draw up more medicine if needed.

13. Remove the needle from the bottle and set the medicine bottle down.

14. The syringe is ready for you to give the injection.
   - If you are not going to give the injection right away, carefully replace the needle cover and set the syringe down.
   - If you are ready to give the injection, go back to the section, **Giving the Injection**, step 5 and proceed.

Talk to your doctor or others on your health care team if you have questions. You may request more written information from the Library for Health Information at (614) 293-3707 or email: health-info@osu.edu.