



Patient Name: _____

Goal: Patient / Caregiver will demonstrate proper preparation and administration of prescribed therapy.

Dr. _____ has prescribed the following medication(s) for you (med/dose/route/frequency):

What Parts of the Body can Be Used for Intramuscular Injection:

The skin, and the muscles under the skin, cover nerves, blood vessels, and bones. It is important to give your injection where you will not hurt any of these body parts. There are 8 possible areas, 4 on each side of the body, where an intramuscular injection can be given. It is important to choose the best area for you. It is also very important to rotate the sites where you give your injections. If you give an injections in the same place every day or even every week, scar tissue can build up. This scar tissue will affect how the medicine will be absorbed. If your nurse or doctor have told you which muscle(s) to use, follow their directions. Muscles change with age. For example, the buttock area is never used for infants or children under 3 years old because it is not developed well enough. The deltoid may work well for a person with developed muscles in the upper body. The deltoid should not be used if that area is very thin or underused. The muscle to be used for injection must be easy to reach.

Following is some information about the safe areas to give your injections.

- **Thigh Muscle - Vastus Lateralis (VAS-tuss lat-er-AL-iss):** The thigh muscles are the easiest to use for self injection. The thigh is used often for children, especially children under 3. It is also a good place for an adult. The thigh area is especially useful if you need to give yourself an injection because it is easy to see. This muscle is called the vastus lateralis. It runs along the top of the thigh (the front) and a little to the outside.
 - **To locate the correct injection site on the thigh,** put your thumb in the middle of the top of the thigh, and your fingers along the side. The muscle you feel between them is the vastus lateralis. When using this muscle for injection, in your mind, divide the thigh (the area between the knee and the hip) into three equal parts. The middle third is where the injection should be given.

- **Hip Muscle - Ventrogluteal (ven-trow-GLUE-tee-ull):** This site is difficult to use for self injection. The hip is an area with good bone landmarks and very little danger of hitting blood vessels or nerves. It is a good place for an injection for adults and children over 7 months old.
 - **To locate the best place for injection site in the hip,** with the patient lying on his/her side, place the heel of your hand on the hip bone at the top of the thigh. Your wrist will be in line with the person's thigh. Point your thumb at the groin, fingers point to the person's head. Form a "V" with your fingers by opening a space between your pointer finger and the other three fingers. Your little finger and ring finger will feel the edge of a bone along the fingertips. The place to give the injection is in the middle of the V-shaped triangle.

- **Upper Arm Muscle - Deltoid (DEL-toyd):** This site is difficult to use for self injection. The person getting the injection can be sitting, standing or lying down.
 - **To locate the best place for injection in the upper arm,** start with a completely exposed upper arm. You will give the shot in the center of an upside down triangle. Feel for the bone that goes across the top of the upper arm. This bone is called the acromion process. The bottom of it will form the base of the triangle. The point of the triangle is directly below the middle of the base at about the level of the armpit. The correct area to give a shot is in the center of the triangle, 1 to 2 inches (2.5 to 5 cm) below the bottom of the acromion process.

- **Buttock Muscle - Dorsogluteal (door-so-GLUE-tee-ull):** This site is difficult to use for self injection. The upper buttock area is the area where most people have received injections.
 - **To locate the best place for an injection site in the buttock muscle,** expose one entire buttock. With an alcohol wipe draw a line from the top of the crack between the buttocks to the side of the body. Starting in the middle of the same side, draw another line across the first one with the alcohol wipe. Start from about 3 inches above the first line to about half way down the middle of the cheek. You should have drawn a cross. In the upper outer square you will feel a curved bone. The injection will be given in the upper outer square below the curved bone.

TO PREPARE AND INJECT THE MEDICATION:

1. **Clean** a well lit area for preparation of the medication(s).
2. **Gather** the following supplies:
 - 1 medication syringe(s) for each injection site (max of 2 mls / injection site)
 - 1 alcohol wipe
 - 1 sterile 2x2 gauze pad
 - 1 pair non-sterile gloves (if medication being administered by someone other than the patient)
 - Sharps Disposal Container
3. **Wash hands** with soap and water. Dry with paper towels or clean towel.
4. **Inspect** the medication syringe label for your name, drug name, dose and expiration date. If any are incorrect, contact the NELC pharmacist immediately.
5. **Choose an injection site** to be used. If self injecting, choose an injection site that is easy to reach. The thigh muscle and the upper, outer buttock muscles work best for self injection. If someone other than you are giving the injection, in addition to these sites, the deltoid muscle of the upper outer arms may also be used. Avoid sites that are close to any scars or bruises. It is important to rotate injection sites with each dose. Check injection site(s) daily for signs of infection: redness, swelling pain or drainage.
6. **Prepare your site for intramuscular injection:**
 - a) Sit or lie in a comfortable position to be able to see the area you are injecting.
 - b) If you are giving the injection to another person, put the gloves on to protect yourself from accidental exposure to blood.
 - c) Clean the injection with an alcohol wipe. Let dry.
7. **Inject the Medication:**
 - a) Remove the needle cover from the end of the syringe and discard. To keep the needle sterile, do not set the needle down or touch it. Hold the syringe in the hand you write with.
 - b) If injecting into the thigh or buttock, stretch the skin tight with your free hand. Keep holding the skin a little to the side of where you plan to insert the needle.
 - c) If using the upper arm, stretch the skin tight then bunch up the muscle for injection.
 - d) Holding the syringe like a dart, use your wrist to inject the needle at a 90 degree angle (straight in). Do not push the needle in, do not throw the

needle in either. The needle is sharp and will go through the skin easily when your wrist action is correct.

- e) Let go of the skin. The needle will want to jerk sideways. As you let go of the skin, hold the syringe so it stays pointed straight in.
- f) It is important that the needle of the syringe is not in a blood vessel. In order to determine this, every time you give an injection, you must pull back on the plunger of the syringe just a little to make sure you aren't in a blood vessel. This will seem difficult at first because you will need to use one hand to hold the syringe steady and one hand pull back the plunger. If blood comes back into the syringe, remove the needle immediately. Do not inject the medicine. If this happens,
 - Dispose of the used medication syringe into the sharps container.
 - Get a new medication syringe.
 - Repeat steps 7 (a) through 7 (f)
- g) Slowly push down on the plunger to inject the medicine. Do not force the medicine by pushing hard on the plunger. Some medicines cause discomfort upon injection. Slow injection will decrease this discomfort.
- h) After all the medicine is injected, pull the needle out quickly at the same angle it went in and place the entire syringe into the sharps container. **REMEMBER:** never recap the needle or try to remove the needle from the syringe before discarding into the sharps container.
- i) Use the dry sterile gauze to press gently on the place where the needle went.

THAT'S IT! YOU DID IT!

POINTS TO REMEMBER:

- **Remember to rotate your injection sites.**
- **To avoid bruising, do not rub the injection site after the medication is given. Simply apply pressure for 30-60 seconds.**
- **Store the medication as directed. If it needs to be refrigerated, remove it from the refrigerator ____ hrs in advance to allow the medication to warm up to room temperature.**
- **Be sure to give your medication at the same time every day.**
- **Be sure the injection site you choose is easy to reach.**
- **If you develop signs of infection (fever > 101°; pain, redness or yellow/green drainage from an injection site) contact your physician.**