

Standard Operating Procedure

Procedure Title:	Testosterone / Estradiol Self-Injection Teaching
Date:	4/30/21
Version:	1.0
Department:	CIC
Approved By:	Brooke Gregory

Purpose:

The purpose of this procedure is to provide instructions on how to teach a patient to self-inject testosterone or estradiol.

Procedure:

The provider has started the patient on testosterone or estradiol injections and the patient needs instructions on how to self-administer the medication.

1. **The patient will need to be scheduled for a self-injection education appointment on the nurse schedule:**
 - a. When scheduling appointment, change provider to nurse, choose self-injection education as appointment type, this is a 30 min appointment.
 - b. Patient to be instructed to bring in their medication and supplies for teaching.
2. **When the patient arrives for their appointment,** a Medical Assistant will review the patient's chart to obtain dosing information and then collect supplies for teaching.
 - a. Medical Assistant to open chart and review order from provider in chart to ensure correct dose of medication is administered.
 - b. Supplies needed for testosterone or estradiol injection are:
 - A minimum of 2 alcohol wipes
 - 1cc syringe (or 3cc depending on pt. dose)
 - 18g needle for draw, and 23 1 ½ g needle for administration.
 - Cotton ball
 - Round band-aid

3. **Medical Assistant will bring patient back into an exam room** to begin teaching proper techniques for self-injection of testosterone. MEDICAL ASSISTANT TO PROVIDE PATIENT WITH “Testosterone Self-Injection Information” of “Estradiol Self-Injection Information” Handout, so they can follow along.

PART 1-Preparation:

- a. Medical Assistant will begin by reviewing supplies and medication patient brought in.
- b. Review with patient proper sanitization technique. MA to wear gloves while assisting with injection.
 - Wash hands with soap and water
 - Sanitize the injection site on skin with an alcohol pad in a circular motion moving from the center out and let dry.
 - Sanitize the metal and rubber top of the testosterone or estradiol vial with a second alcohol pad.
- c. Medical Assistant will teach the patient how to prepare syringe and needle for testosterone or estradiol extraction. Open a new syringe and draw needle package. Open package at the end where they will attach and leave the packaging on (at the top of the syringe and bottom of the needle packaging); this will keep your supplies sanitary. Grasp the needle and syringe where they are covered by the packaging and screw the extraction needle into the syringe.
- d. Medical Assistant will teach the patient how to extract the testosterone or estradiol. Once ready, take the lid off the draw needle. Pull the syringe down to your prescribed injection amount (to fill with air). Hold the testosterone or estradiol bottle firmly on counter and insert the needle into the top of the bottle through the middle of the rubber plunger. Push the air into the bottle and then tilt the bottle upside down so that the fluid moves to the top of the bottle and ensure the needle is submerged in the medication. Pull the plunger down so the fluid fills the syringe to the prescribed amount. Once that is done, set the bottle on the counter and pull the needle out to carefully cap it.
- e. Medical Assistant will teach patient how to switch to injection needle. Instruct the patient that the thinner needle is used for injecting testosterone or estradiol. The most effective way to inject is to leave the syringe pointed upwards and pull the plunger down to allow a small amount of air to fill the syringe; this ensures that the testosterone or estradiol will not spill when the needle is taken off. Then remove the draw needle. Unscrew it once it has been recapped and place the removed needle directly into their

sharps container. Open the injection needle packaging and screw it into the syringe like the draw needle, ensure it is secured. Take packaging and needle cap off.

f. Medical Assistant will teach patient how to get rid of any bubbles (this is the most important step). Instruct patient to flick the syringe until all other bubbles have floated to the top and released. Push the plunger until a small drop of testosterone or estradiol comes out of the top of the needle.

PART 2-Injection:

- a. Medical Assistant will now teach patient on how to properly inject testosterone or estradiol intramuscularly (IM) and/or subcutaneously (SQ).
 - **For IM injection**, the Medical Assistant will teach the patient how to self-administer the Testosterone or Estradiol into the thigh as this is the most popular and easiest site to do by themselves. When injecting into the thigh, lightly pinch about an inch of sanitized skin, around the area you want to inject. Insert the needle and then relax the skin you were pinching. Remind the patient to relax their muscles as if they are tense, it will hurt more.
 - **For SQ injection**, the Medical Assistant will teach the patient that SQ injections are done in the fatty tissue of the lower stomach/hip area. Instruct the patient to pinch the skin and insert the needle, at a 45-degree angle.

- b. **Medical Assistant will teach patient that once they have injected the needle, they need to pull back on the plunger slightly to check if they are in a vein**, this action is called aspirating. If blood comes back into the syringe, remove the needle and try a different area, remembering to aspirate again. If when they pull back the bubbles are clear, they are good to inject. Remind the patient not to worry about any bubbles in the testosterone or estradiol at this point, anything taken from the body can go back in.

- c. To inject the medication the Medical Assistant will instruct the patient to push the plunger in to inject the testosterone or estradiol and remove the needle. Inform the patient it is normal for some bleeding to occur or if some testosterone or estradiol leaks out. Instruct the patient to apply pressure with the cotton ball until it stops. Excessive bleeding means that they nicked a vein, this will heal on its own. Dispose of the needle by carefully capping it and putting

it into the sharps container. Then instruct patient to apply a band aid over the injection site.

4. **Medical Assistant will answer any questions** patient may have regarding testosterone or estradiol self-administration and then escort out of the exam room.

5. **Medical Assistant will document Testosterone or Estradiol self-administration teaching** into the nurse visit.
 - a. If the Medical Assistant administered the medication, they need all pertinent information to document as an order.
 - b. If the Medical Assistant did the teaching only, they would put the chief complaint as nurse visit and injection. In the note section document that proper technique was taught including proper sanitization and how to draw back to check for blood. Visit will then be changed to the prescribing provider and click done with intake to send to provider once note has been completed.

Patients may need more than one self-injection teaching appointment to feel comfortable with self-administration before they are able to perform the injection on their own. If that is the case, repeat above steps for each self-injection teaching nurse visit.