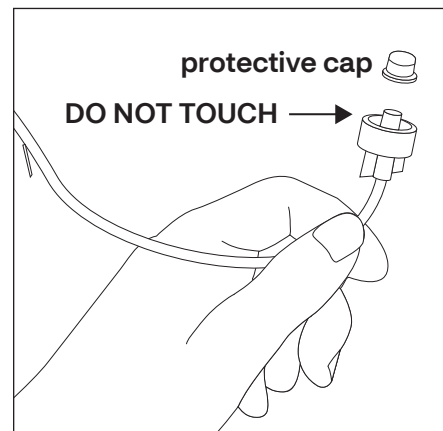


Butterfly Needle Insertion and Removal

Before You Begin

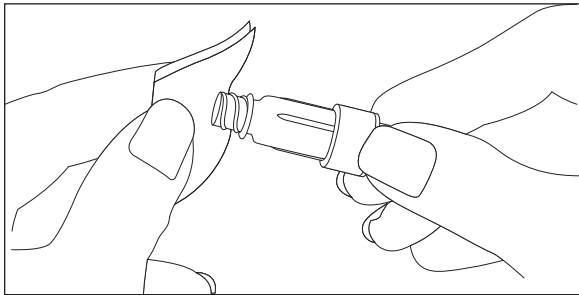
There are important steps you must take before you begin. Please refer to your SASH Teaching Mat for more details.

1. **Clean** your work area.
2. **Wash** your hands.
3. **Gather** your supplies and place on a clean, dry work surface.
 - a. For insertion:
 - 1 pre-filled saline syringe (sodium chloride)
 - Intravenous (IV) start kit
 - Injection cap
 - Alcohol pads
 - Butterfly needle
 - b. For removal:
 - 2x2 gauze
 - Tape
 - Adhesive bandage
 - Sharps container
4. **Attach** the injection cap to the end of the extension tubing on the butterfly needle.
 - a. Remove the protective cap from the end of the extension tubing on the butterfly needle.

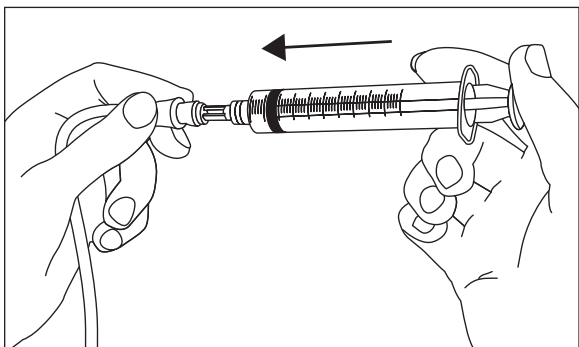


- b. Hold the end of the tubing in one hand. For example, use your left hand if you are right-handed. Use your other hand to open the injection cap package.
- c. Remove the cover from the end of the injection cap. Connect the injection cap to the end of the extension tubing. Twist clockwise until secure.

5. **Prime** the extension tubing on the butterfly needle.
 - a. Remove any air from the saline or heparin syringe. Hold the syringe upright and press firmly on the plunger while the tip cap is still on. Keep pressing until you feel the plunger move. Then, release pressure from the plunger and loosen the tip cap. Push the plunger forward to remove any air. Tighten the cap again before placing the syringe down.
 - b. Scrub the injection cap with an alcohol pad for 15 seconds. Let it air dry for five seconds.



- c. Make sure the clamp is open on the extension set.
- d. Remove the tip cap from the saline syringe. Attach the syringe to the injection cap by pushing and twisting clockwise until secure. **The tip of the syringe is sterile. Do not touch it or let it touch any surfaces.** If this happens, throw away this syringe and use a new saline syringe.
- e. Push in the syringe plunger slowly to prime the tubing. Stop pushing when you see a drop of liquid at the end of the needle.



Leave the syringe attached to the extension tubing.

Insertion

1. Have all equipment needed to insert the butterfly needle next to you on a clean area. Open the alcohol pads package and have a three-inch strip of tape ready to apply, after you have inserted the butterfly.
2. **Insert** the butterfly needle.
 - a. Locate the best site (vein) to insert the needle. The butterfly needle can be inserted in a vein on the back of your hand or in the space near your elbow.

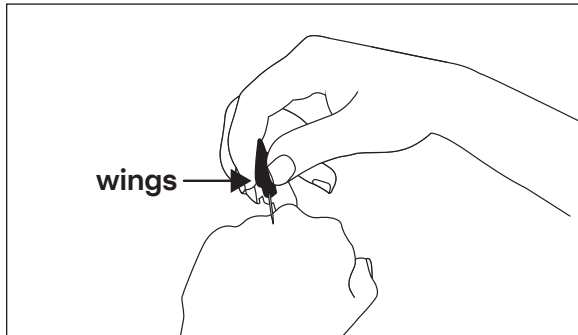
Note: If you have trouble finding a good vein, place a warm towel over the vein and pump your fist (open and close it) several times. Or, let your arm/hand hang down for a few minutes. This can help “plump up” the vein and make it easier to see and feel.

- b. Apply the tourniquet as your nurse instructed. Place it two to three inches above the site where you will insert the needle.

Note: The tourniquet should not be left in place for more than two to three minutes. If it takes longer than this to locate and clean a good vein, remove the tourniquet and replace it after the site has been cleaned and has had time to dry.

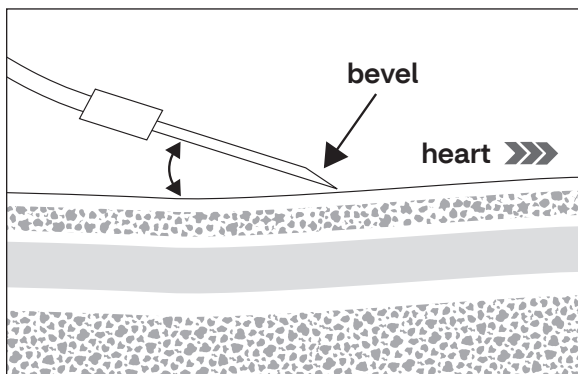
- c. Use an alcohol pad to clean a three- to four-inch area around the insertion site. Allow the area to air-dry completely. Do not fan it or blow on it.

- d. Pick up the butterfly needle by the wings (tubing and saline syringe attached). Pinch the wings between your thumb and first finger.



One side of the wings will be textured for an easier grip. Remove the cover from the needle. **Do not touch the tip of the needle.**

- e. Hold the needle so that the bevel (angled side) is facing up and the sharp point is down, close to your skin. Insert the needle over the vein at a 15- to 30-degree angle. Place the needle so that it is lined up with the vein and pointing toward your heart.



- f. Insert the needle in one smooth, quick motion to prevent the vein from rolling away from the needle. You may feel a pop as the needle goes through the skin and enters the vein.

Note: If the vein rolls, ask someone to press gently on your arm below where the needle goes into your skin. This can help keep the vein from moving. Anyone helping you should wear clean gloves.

- g. Check to make sure you have “blood return.” This is when blood backs up into the extension tubing.
- h. When you have blood return, lower the angle of the needle. Make sure it is almost level with your skin. Insert the needle further until it is completely in the vein.
- i. Once the needle is fully inserted, lay the butterfly wings flat against your skin. Place a small piece of tape over the wings. This will hold the needle in place and prevent it from being pulled out accidentally.
- j. Remove the tourniquet.

3. **Flush** with saline:

- a. Use the syringe that is already attached to the extension tubing. Push in the syringe plunger to flush the catheter with the amount of saline ordered.

Note: If you find it hard to push in the plunger while flushing, make sure all clamps are open. Do not force a flush. If you have pain, burning or swelling when flushing, stop and call your nurse.

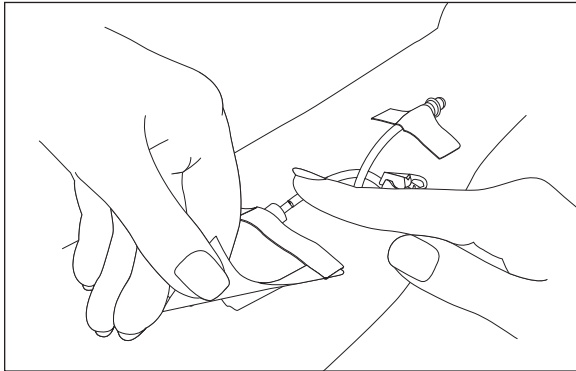
- b. Remove the syringe from the injection cap.
- c. Clamp the catheter and/or extension set.
4. **Secure** the catheter with tape or dressing, as instructed by your nurse.
5. **Administer** your medication as your nurse instructed.

Removal

1. Remove the butterfly needle when the administration of medication is complete.

Start by removing the tape/dressing:

- a. Hold the catheter against the skin with one hand.
- b. With the other hand, carefully remove the tape/dressing that covers the insertion site and extension set.

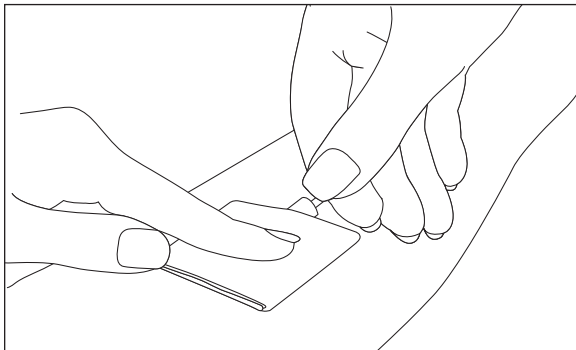


Note: Do not use scissors to remove the tape.

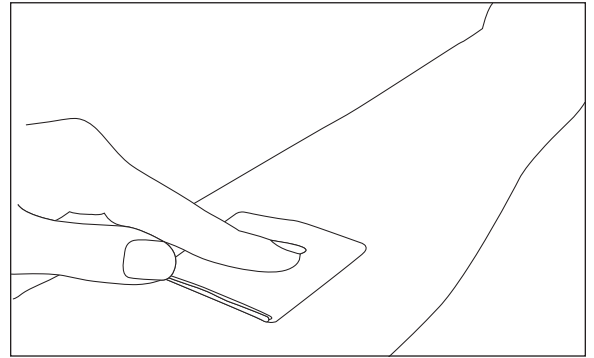
2. Have all equipment (gauze and adhesive bandage) needed to remove the butterfly needle open and next to you on a clean area.

3. **Remove** the catheter or needle.

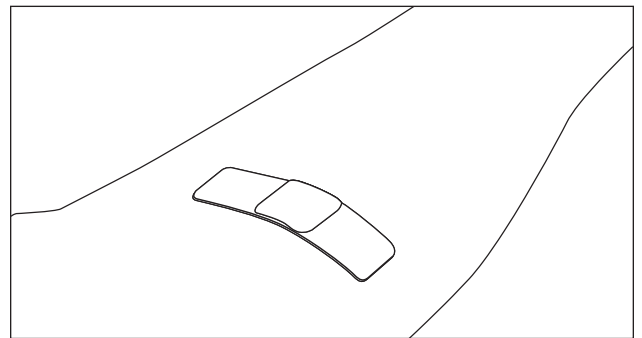
- a. Press the gauze pad over the insertion site.
- b. Remove the catheter or needle from the vein by pulling slowly and carefully toward your fingers. **If the catheter is difficult to remove, STOP and contact a Coram nurse.** Activate the safety needle cover, as instructed by your nurse.



- c. Maintain the pressure from the gauze pad for at least 30 seconds or until any bleeding stops.



4. **Apply** an adhesive bandage over the site and leave it in place for up to 24 hours.

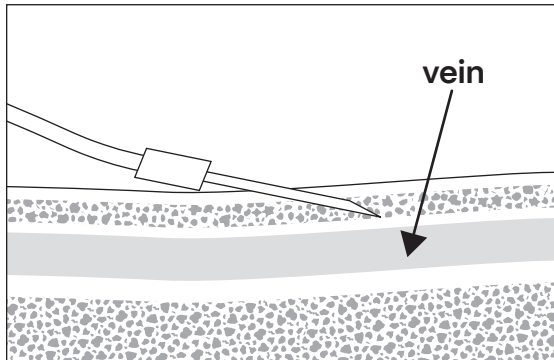


5. **Discard** the catheter or needle and extension set in the sharps container.

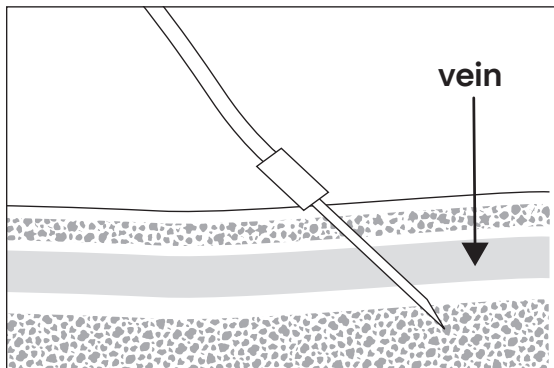
6. **Wash** your hands.

Tips/Reminders:

- Blood return is very important. It confirms that the needle is in the correct location. This makes sure that the needle will send your medication into the vein, not the tissue beneath your skin. If you do not get a blood return, try a different vein.
 - In this picture, the needle did not go in far enough. There would be no blood return and the medication would be infused beneath the skin.



- Instant swelling around the insertion site is a sign that the needle is not in the correct spot. (It may have just nicked the vein or gone all the way through the vein.) This causes blood to seep out of the vein and pool under the skin.
 - In this picture, the needle went in too far and went all the way through the vein.



- If this happens, remove the tourniquet and needle. Apply pressure to the site

for several minutes. Then tape a small piece of gauze over the site to prevent further swelling.

- Next, choose a new vein. You must choose one that is above (higher up than) the previous site. Follow the steps for inserting the butterfly needle (see the *Insertion* section).
- After you start to infuse, watch the skin around the catheter for swelling. Also, check whether the skin is cool to the touch, and whether you feel pain with flushing the catheter. If the skin is warm or you feel pain, the needle may have moved out of the vein. This would cause the medication to infuse beneath the skin. If this happens:
 - Remove the needle and apply pressure to the site for several minutes. Tape a small piece of gauze over the site to prevent further swelling.
 - Next, choose a new vein. You must choose one that is located above the previous site. Follow the steps for inserting the butterfly needle (see the *Insertion* section).
- In some cases, the needle or the medication may irritate the lining of the vein. If this happens, the insertion site may become red and tender after the infusion. Or it may develop a hard, red streak.
 - Apply a warm, moist, clean towel to the site for 10 to 15 minutes. Contact your nurse.

Refer to your Infusion Patient Resource Guide and medication label. They can provide details on how to handle and store medication.

SASH (SASH=S: Saline; A: Administration of Medication; S: Saline; H: Heparin)

This information is not a substitute for medical advice or treatment. Talk to your doctor or health care provider about this information and any health related questions you have. Coram assumes no liability whatsoever for the information provided or for any diagnosis or treatment made as a result of this information.

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