

How to use a J-Tip for Vascular Access

Watch the demo video at:

<https://www.youtube.com/watch?v=MGvSWtuu4z4>

Key Points:

- Topical anesthetics must be offered to every patient for all appropriate procedures (i.e. IV start, lab draw).
- J-Tip is a topical anesthetic that works quickly and is easy to use.
- **Protocol #912.6005 Pain Management for Vascular Access for Pediatric Patients** provides guidelines to facilitate appropriate lidocaine use for decreasing the pain of vascular access. An order that requires a venipuncture (IV start, blood draw) to complete is an implied order that this protocol may be initiated. This protocol applies to J-Tip, ELA-MAX, and ethyl chloride (cold spray). This protocol may be used for patients 2 months of age and older.
- The J-Tip will appear on the patient's MAR and must be scanned prior to administering. There is a patient charge associated with the J-Tip.
- Use of J-Tip is not recommended for:
 - Patients who are receiving chemotherapeutic agents or blood thinners
 - Patients with bleeding disorders (eg. Hemophilia, von Willebrand's Disease, ITP)
 - Preterm infants or neonates
 - Access through an implanted infusion device (port or port-a-cath)
 - Patients who are allergic to lidocaine.

How to use J-Tip:

1. Select the appropriate injection site and then disinfect the area, allowing it to dry completely. Any residual disinfectant on the skin may cause some discomfort and/or a stinging sensation during the procedure.
2. Prep the J-Tip for injection by removing the orange luer cap or sterility cap.
3. If the injection is to be used near a vein, then the Z-Track Method is recommended: The method begins by making sure the skin is relaxed. Then make a "bull's eye" using the J-Tip to mark the injection site. Next, remove the orange safety cap by pinching each side. The skin then should be manipulated, moving the "bull's eye" to the desired location away from the vein and placing the J-Tip back on the mark. If a vein rolls with the skin, do not use the Z-track Method and inject to the side away from the vein.
4. Inject the medication: Make sure to select the area that will have the most subcutaneous space. Next, hold the J-Tip at a 90 degree angle to the skin, with slight skin contact and at arm's length away. Then depress the activation lever. Wait 2 to 3 seconds after the injection before removing the J-Tip and properly disposing it. After the procedure, you may notice a blood reflux or skin wheal at the site of the injection.
5. In areas where there is a lack of subcutaneous tissue, some medication may "spill" out. Simply wipe any excess medication from the skin. You can also apply light pressure in a circular motion at the injection to help disperse the medication. If the injection site was near a vein, you can also wipe in the direction of the vein to assist medication dispersion.

Frequently Asked Questions:

- ***How does J-Tip work?***
 - J-Tip uses pressurized gas to send medication into the subcutaneous portion of the skin. When the device is activated, pressurized gas is used to create an ultra-fine stream of medication which will then penetrate the skin. All of this is done within a fraction of a second without the use of a needle.
- ***Can I use the J-tip over a Port?***
 - At this time we do not have clinical studies that support use of the J-Tip over an implanted port. Materials used by different manufacturers vary and the port could be damaged if it cannot withstand the injection pressure of the J-Tip.
- ***Can I use the J-tip for venipuncture/lab draw?***
 - Yes, the J-tip is approved to use for venipuncture/lab draws. Please use caution if you are drawing toxicology labs as there has been one incident where lidocaine contaminated the lab.
- ***When should I remove the Tourniquet when used the J-Tip?***
 - If a Tourniquet is used to enlarge the vein, it should be released prior to the use of the J-Tip. This will help reduce the amount of blood reflux post injection.
- ***I heard that J-Tip makes a noise. What does it sound like?***
 - When a J-Tip device is activated, it makes a 'pop' followed by a 'hiss', similar to opening a can of soda. This is just the sound of the gas traveling through the unit. It is a good idea to make the patient and patient's family aware of this prior to injection.
- ***Why do I need to hold the device at a 90 degree angle to the skin?***
 - By holding the J-Tip at a 90 degree angle to the skin we are able to get the maximum absorption of medication from the injection while reducing any potential for a skin abrasion. Keep in mind we are using pressurized gas to deliver medication. The medication leaves J-Tip in a fraction of a second, so an angle less than 90 degree could cause medication to travel along the skin causing an abrasion and discomfort to the patient.
- ***How hard do I have to push on the skin?***
 - Apply light pressure between the J-Tip and the skin, creating no more than a little dimple. This way no skin compression occurs and the medication can disperse properly and efficiently.
- ***How is the device activated?***
 - Once the two orange pieces are removed, J-Tip is activated by the depression of the Activation Lever toward the back end of the device. The Activation Lever will break the seal on the gas cartridge, and consequently force the medication out of J-Tip and into the subcutaneous area. It is important that J-Tip is not moved during injection.

Other Important Considerations:

- Call a Child Life therapist for support during procedures. The Child Life therapists have downloaded apps that they can use with patients to describe the sound of the J-Tip.
- If there are videos that you find would be helpful in educating our patients and families about the J-Tip, please let Michelle Wacek know and she can get these added to GetWell Network.
- For more information about the J-Tip, please go to <http://jtip.com>
- Let your Pain Committee members know what is working and what barriers are in place—share your tips and tricks with us!

Thank you!

Your Pain Committee