**EZ-IO® Proximal Tibia Insertion Site Identification – Adult**

Extend the leg. Insertion site is approximately 2cm **medial** to the tibial tuberosity, or approximately 3cm (two finger widths) below the patella and approximately 2cm **medial,** along the flat aspect of the tibia.

**EZ-IO® Proximal Tibia Insertion Technique - Adult**

* Prepare the site by using antiseptic of your choice
* Use a clean, “no touch” technique
* Remove the needle set cap
* Stabilize the extremity
* Aim the needle set at a 90-degree angle to center of the bone
* Push the needle set tip through the skin until the tip rests against the bone
* The 5mm mark must be visible above the skin for confirmation of adequate needle set length
* Gently drill, advancing the needle set approximately 1-2cm after entry into the medullary space or until the needle set hub is close to the skin
* Hold the hub in place and pull the driver straight off
* Continue to hold the hub while twisting the stylet off the hub with counter clockwise rotations
  + The catheter should feel firmly seated in the bone (1st confirmation of placement)
* Place the stylet in a sharps container
* Place the EZ-StabilizerTM dressing over the hub
* Attach a primed EZ-Connect**®** extension set to the hub, firmly secure by twisting clockwise
* Pull the tabs off the EZ-Stabilizer dressing to expose the adhesive, apply to the skin
* Aspirate for blood/bone marrow (2nd confirmation of placement)

**Recommended Anesthetic for Adult Patients Responsive to Pain:**

* Observe recommended cautions/contraindications to using 2% preservative and epinephrine free lidocaine (intravenous lidocaine)



* Confirm lidocaine dose per institutional protocol
* Prime EZ-Connect extension set with lidocaine

*Note that the priming volume of the EZ-Connect is approximately 1.0mL*

* Slowly infuse lidocaine 40mg IO over 120 seconds

Allow lidocaine to dwell in IO space 60 seconds

* Flush with 5 to 10mL of normal saline
* Slowly administer an additional 20mg of lidocaine IO over 60 seconds

Repeat PRN

* Consider systemic pain control for patients not responding to IO lidocaine

**Adult Unresponsive to Pain**

* Prime EZ-Connect extension set with normal saline
* Flush the IO catheter with 5-10 mL of normal saline
* Connect fluids if ordered and pressurize to 300 mmHg for maximum flow
* Assess for any signs of extravasation/complications

Should patient develop signs that indicate responsiveness to pain, refer to section “Recommended Anesthetic for Adult Patients Responsive to Pain”

**EZ-IO® Removal Technique**

* Remove EZ-Connect and EZ-Stabilizer dressing
* Stabilize catheter hub and attach a Luer lock syringe to the hub
* Maintaining axial alignment, twist clockwise and pull straight out

Do not rock the syringe

* Dispose of catheter with syringe attached into sharps container
* Apply pressure as needed, dress per institutional protocol

**Lidocaine dosing recommendations were developed based on the research below. For additional references, research and dosing charts, please visit www.eziocomfort.com**

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*\*Research sponsored by Vidacare Corporation*

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