

INTRAOSSUEOUS INFUSION PROCEDURE – PEDIATRIC

1. **PURPOSE:** To obtain rapid circulatory access to provide necessary intravenous fluids or medications
2. **INDICATIONS:**
 - ▶ Approved for use in the pediatric patient >3 kg and <40 kg. (If greater than 40 kg, "INTRAOSSUEOUS INFUSION PROCEDURE - ADULT" on page 132)
 - ▶ Consider for use in any unconscious or seriously ill or injured patient in whom IV access cannot be established in a very timely fashion
 - ▶ Any medications or fluids that can be given in a peripheral vein can be given intraosseous.
3. **CONTRAINDICATIONS:**
 - ▶ Inability to locate tibial landmarks
 - ▶ Fracture or recent surgery in the tibia to be used
 - ▶ Infection over the insertion site
4. **POSSIBLE COMPLICATIONS:**
 - ▶ Compartment syndrome
 - ▶ Growth plate injury
 - ▶ Skin infection
 - ▶ Failed infusion
 - ▶ Bone infection
 - ▶ Bony fracture
5. **PREPARATION:**
 - ▶ Place the patient in the supine position
 - ▶ Put a small towel roll under the knee
 - ▶ Consider use of MS for analgesia (see "Pain Management" page 60)
6. **PROCEDURE:**
 - 6.1 Locate the anatomical site (one centimeter inferior and medial to the anterior tibial tuberosity) – STEP 1
 - 6.2 Prepare the skin with chlorhexidine. STEP 2
 - 6.3 Consider MS for analgesia (see "Pain Management" page 60)
 - 6.4 Load the needle onto the driver
 - 6.5 Firmly stabilize the leg near (not under) the insertion site
 - 6.6 Firmly press the needle against the site at a 90° angle and operate the driver. Use firm, gentle pressure. STEP 3
 - 6.7 As the needle reaches the bone, stop and be sure that the 5mm marking on the needle is visible; if it is, continue to operate the driver
 - 6.8 When a sudden decrease in resistance is felt STOP, remove the driver and the stylet from the catheter. STEP 4
 - 6.9 Do not attempt to aspirate bone marrow (may clog needle & tubing)
 - 6.10 Use a syringe to rapidly infuse 5 mL NS. (Note: this is an important step)
 - 6.11 If no infiltration is seen, attach the IV line and infuse fluids and/or medications as normal STEP 5
 - 6.12 IV bag will need to be under pressure. STEP 6
 - 6.13 Secure the needle



STEP 1



STEP 2



STEP 3



STEP 4



STEP 5



STEP 6