INTRAOSSEOUS INFUSION PROCEDURE – ADULT

1. **PURPOSE:** To obtain rapid circulatory access to provide necessary intravenous fluids or medications.

2. **INDICATIONS:**
   - **Approved for use in the adult patient only >8 years old and >40 kg.** (If less than 40 kg, see “INTRAOSSEOUS INFUSION PROCEDURE - PEDIATRIC” on page 133)
   - 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 intraosseously.

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
   - Failed infusion
   - Growth plate injury
   - Bone infection
   - Skin 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 39)

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 39)
   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 and the flange of the needle rests against the skin, 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 10 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.