

PROCEDURE FOR: Intraosseous Infusion: Initiation of

- POLICY:
1. Following two unsuccessful attempts at peripheral venous access in critically ill children under age five, intraosseous infusion may be instituted by a trained provider.
  2. Cannulation of a child > age 5 or adult will be inserted by MD.

EQUIPMENT: Rigid needle with inner stylet,  
ideally a disposable bone marrow aspiration needle  
Alcohol swab  
6cc syringe

PROCEDURE:

<u>ACTION</u>	<u>POINTS OF EMPHASIS</u>
1. Verify that child is under age 5.	1. After age 5 the red marrow is replaced by less vascular yellow marrow.
2. Select appropriate site.	2. Anterior medial aspect of tibia 2-3 cm below proximal tibial tuberosity. Do not use if fracture is suspected.
3. Prepare site with alcohol or other antiseptic solution.	3. Observe skin for evidence of infection.
4. Restrain limb to be used.	
5. Lidocaine may be injected locally to decrease pain.	5. Not an issue in an unconscious child.
6. Insert bone marrow needle with firm downward pressure using "screwing" or To and Fro motion.	6. A "pop" or sudden decrease in resistance signals entrance into medullary cavity.
7. Inner stylet is removed and a syringe attached.	
8. Aspirate to confirm placement	8. Aspiration of bone marrow (similar to blood) confirms needle placement.
9. Attach IV tubing to infuse fluids and meds.	9. Pain and discomfort may be caused by increased pressure within

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ACTION

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10. Apply dressing and tape in place.

11. Conventional IV site should be obtained within 2 hours.

12. To discontinue, remove needle and apply sterile dressing and direct pressure for 5 minutes.

medullary cavity.

11. Most infections occurred when catheter remained in place for prolonged period of time.

ASSOCIATED STANDARD:    Intraosseous Infusion in Infants and Young Children

EFFECTIVE DATE:       6/90

REVISION DATE(s):     9/96, 10/99, 3/06, 9/08