



SIERRA-SACRAMENTO VALLEY EMS AGENCY PROGRAM POLICY

REFERENCE NO. 1110-N

SUBJECT: INFREQUENTLY USED SKILLS – VERIFICATION OF MAINTENANCE

INTRAOSSIOUS INFUSION ANNUAL SKILLS VERIFICATION (MANUAL PEDIATRIC)

NAME _____ DATE _____

ALS AGENCY _____ EVALUATOR _____

OBJECTIVE: The candidate will demonstrate the ability to correctly insert a manual intraosseous needle in a pediatric patient, check for proper needle placement, stabilize the needle, and administer fluid.

EQUIPMENT: Intraosseous needle, IO manikin or long bone (such as a tibia) from chicken or other animal, gauze roller bandage or other material to maintain proper position of long bone, flush solution, IV solution, IV administration set, three-way stopcock, blood pressure cuff or pressure bag appropriate syringes, recognized antiseptic agent, appropriate PPE.

PERFORMANCE CRITERIA AND CONDITIONS: The candidate will be presented with a long bone and requested to initiate an intraosseous infusion.

EVENT	DOES	DOES NOT
1. States the indications for intraosseous infusion in a pediatric patient <ul style="list-style-type: none">• Weight 3 kg or more• Unable to achieve IV access rapidly (within 60-90 seconds) and present with one or more of the following conditions:<ul style="list-style-type: none">○ Cardiac Arrest○ Hemodynamic instability (SBP < 90 & signs of shock)○ Imminent respiratory failure○ Status epilepticus with prolonged seizure activity > 10 minutes and refractory to IM / IN anticonvulsants○ Toxic conditions requiring immediate IV access for antidote		
2. States the contraindications for intraosseous infusion <ul style="list-style-type: none">• Fracture or suspected vascular compromise of the selected tibia• Previous significant orthopedic procedures (IO within previous 24 hours; prosthesis)• Inability to locate anatomical landmarks for insertion• Skin infection overlying the area of insertion		
3. States or demonstrates the use of PPE		
4. Assembles equipment and fills syringe with flush solution (if necessary)		
5. Selects proper / approved anatomical site for IO infusion <ul style="list-style-type: none">• 1 – 3 cm distal to tibial tuberosity on anteromedial surface of proximal tibia		
6. Preps IO site using aseptic technique		

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INTRAOSSUEOUS INFUSION ANNUAL SKILLS VERIFICATION (MANUAL PEDIATRIC) – Cont.

EVENT	DOES	DOES NOT
7. Inserts IO needle at the proximal tibial site, directing the needle caudally		
8. Penetrates the bone with firm pressure and a rotary (“screwdriver”) motion. Identifies a “pop” and a sudden lack of resistance signaling		
9. Stabilizes device, removes stylet and places in sharps container		
10. Attaches syringe and aspirates for marrow contents and / or slowly infuses 2 – 3 ml of NS while observing the site for absence of infiltration to confirm patency		
11. Administers 0.5 mg / kg of 2% lidocaine (not to exceed 50 mg) if patient responds to painful stimuli (may be verbalized)		
12. Syringe flushes catheter with 10 ml of NS to establish infusion (No Flush = No Flow)		
13. Attaches IV administration set and administers proper fluid by applying pressure to the fluid bag		
14. Properly secures device		
15. Checks administration rate and IO site for infiltration		