

**Table 7. Topical Anesthesia**

| MEDICATION   | RECOMMENDED DOSAGE  | ROUTE OF ADMINISTRATION   | ONSET      | DURATION  | ADDITIONAL INSTRUCTIONS   | PRECAUTIONS/ CONTRAINDICATIONS  |
|--|---|---|------------|---|---|---|
| <b>EMLA CREAM (2.5% LIDOCAINE, 2.5% PRILOCAINE)</b>          |   |   |            |   |   |   |
|  | 2.5 gm  | Topically (venipuncture and venous cannulation, lumbar puncture, arterial puncture) | ½ - 1 hour | 1 hour after removal of occlusive dressing          | Provides dermal/topical anesthesia. Dermal application may cause a transient, local blanching followed by transient, local redness or erythema. Apply cream 2 in x 2 in area in a thick layer at the site of procedures. Place an occlusive (i.e., OpSite, transparent) dressing over site. Apply at least ½ hour before IV puncture. After 1-1½ hr, wipe off cream, clean the area with an antiseptic solution, and prepare for vein puncture. | Do not use in children younger than 1 month of age. Do not apply to broken or inflamed skin. Contraindicated in patients with a known history of sensitivity to local anesthetics. Use with care in patients with conditions or therapy associated with methemoglobinemia (prilocaine). Avoid inadvertent trauma to the treated area by scratching, rubbing, or exposure to extreme hot or cold temperatures until complete sensation has returned. |
| <b>TAC (TETRACAINE/ADRENALINE/COCAINE)</b>                   |   |   |            |   |   |   |
|  | Total dose of TAC should be limited to 1.5 mL/10 kg (Concentration: 0.5% tetracaine, 0.05% adrenaline, 4-11% cocaine) | Topically (suture or lacerations)   | 10-20 min  | 45-60 min   | Soak gauze pad in solution and place directly over wound for 5-10 min. Anesthesia can be judged by the appearance of blanching at the wound site.   | Do not use on mucous membranes or areas with end-arterial circulation (such as fingers, toes, nose, and penis).   |
| <b>TETRACAINE (AMETHOCAIME) CREAM</b>                        |   |   |            |   |   |   |
|  | 4% cream  | Topically under occlusion   | 40 min     | 4 hours   | Apply under occlusion for 40 min in children undergoing IV placement. Vasodilation has been noted.  |   |
| <b>IONTOPHORESIS</b>   |   |   |            |   |   |   |
|  | 2% lidocaine with epinephrine 0.6-1 mL  | Electrode well over intact skin   | 10 min     | 10 min without epinephrine, 60 min with epinephrine |   | Tingling, itching, burning of skin over both electrodes may occur. Do not use in patients with pacemakers or over metal indwelling catheter ports, or fingers, nose, toes, or penis.  |
| <b>LET (LIDOCAINE 5%, EPINEPHRINE 0.1%, TETRACAINE 0.5%)</b> |   |   |            |   |   |   |
|  | 1-3 mL  |   | 20-30 min  | 45-60 min   | May need to supplement with injected buffered lidocaine before suturing.  | Effective in 75-98% of facial and scalp lacerations, only 40-60% of extremity wounds.   |