

# Standardized Protocol for Lidocaine Topical Allergy and Subcutaneous Toxicity & Allergy Protocols

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## **ELIGIBILITY**

Patients undergoing intradermal filler injections, laser to the skin and cutaneous lesion excision with or without nerve blocks using topical and or sub and intra-cutaneous lidocaine

## **EXCLUSIONS**

Topical: Prior allergy to local anesthetics  
Injectional: Liver failure (Bilirubin > 25 micromol/L)  
Severe cardiac failure or heart block  
Uncontrolled seizures

## **TESTS**

For first treatment: if patient has questionable allergic reaction place a 0.1cc intra-cutaneous injection on the mid volar left fore-arm of a mixture of 0.01 cc ( 1 10<sup>th</sup> of 0.1cc ) of 1% lidocaine in 10cc of N Saline ( total concentration of lidocaine is 0.001% ) . If no reaction noted within 20 minutes, may continue with topical and or injectional lidocaine. For immediate reaction place tuornequet above the site, give 50 mg benadryl Im deep intramuscular upper outer quadrant buttock, epinephrine inhaler 2 pufffs, 10mg dexadrone IM contralateral buttock. Release tourniquet after 20 minutes slowly, if any signs of moderate allergic and severe reaction: see below, call fire rescue and notify MD : cell 510 508-3428, service 925 975-3031, home 510 547-1136

## **PREMEDICATIONS**

None

## **TOXICITY TREATMENT**

- 1. CNS Effects:** Reactions from **lidocaine** usually involve CNS effects, and are dose related. They include drowsiness, dizziness, hallucinations, confusion, dissociation, headaches, visual and auditory disturbances, muscle twitches, numbness around mouth, metallic taste, nausea, vomiting, dyspnea. When they occur, stop the injection and contact physician. Injection may be restarted at lower rate after resolution of symptoms as per physician's orders. **Unrest, tremor and facial twitching are warning signs of impending generalized**

**convulsions. Perspiration, dyspnea, and short intervals of apnea are warning signs of impending respiratory arrest.**

- 2. Cardiovascular Effects:** If any of the above reactions are noted 3 BP recordings should be made over a 30 minute period. Reactions are rare with **lidocaine** and are usually related to high serum levels of **lidocaine**; they may be the first manifestations of **toxicity**. If blood pressure changes over 3 readings, stop injections.

## **ALLERGIC REACTIONS**

1. Minor: local itching may be noted.  
Management: remove all topical anesthetic, 50 mg benadryl po, medrol dose pack po start immediately after leaving office
2. Moderate: urticarial reaction, to a more formal generalized measles like eruption. Management: remove all topical anesthetic, 50 mg benadryl IM, dexamethasone 10mg IM: upper outer quadrant of the buttock deep intramuscular, unless unstable Diabetes mellitus, followed by oral benadryl, medrol dose pack, po, minimum of 1 hour observation in office, 3 BP checks over 30 minutes
3. Severe: airway compromise and or cardiovascular vasodilation from anaphylactic reaction.  
Management: remove all topical anesthetic epinephrine inhaler, , call for immediate fire rescue services and call Dr. Moulton-Barrett cel 510 508-3428, service 925 975-3031, home 510 547-1136

### **Equipments to be maintained and within expiration dates:**

BP monitoring equipment

Benadryl IM: 50mg=1cc

Dexamethasone IM10mg =1cc

Benadryl po: 50 mg tablets

Tuberculin , 3 cc syringes, 25 g needles and 22g needles  
alcohol swabs, small circular bandaids, cotton balls