

DIPHENHYDRAMINE HCl

Use as a local anesthetic

Supplies:

- (1) Two 5 mL sterile, disposable syringes with needle
- (2) Diphenhydramine is supplied in 1 mL ampules containing 50 mg/mL
- (3) Diluent, such as normal saline, D5W, lactated ringers solution
- (4) Epinephrine HCl, 1:1000 concentration, 1 mL ampule
- (5) 1 mL tuberculin syringe

Preparation of diphenhydramine HCl:

- (1) Load contents of 1 mL ampule into syringe
- (2) Dilute to a total of 5 mL of fluid by adding 4 mL of diluent
- (3) Label syringe “diphenhydramine HCl 10 mg/mL”

Addition of epinephrine:

- (1) Place 0.05 mL of epinephrine into the tuberculin syringe (this is $\frac{1}{2}$ of one-tenth of an mL)
- (2) Carefully inject the epinephrine into the 5 mL syringe of diphenhydramine
- (3) Mix the contents well
- (4) Label syringe: ‘diphenhydramine HCl 10 mg/mL, epinephrine 1:100,000’

Technique:

Administer diphenhydramine HCl in the same manner and volume as any traditional local anesthetic

Duration of action:

Pulpal anesthesia: 30 to 60 minutes

Soft tissues: 2 – 4 hours

Side effects:

Drowsiness . . . should NOT permit patient to drive automobile

Soreness at injection site . . . inject slowly

If N₂O-0₂ is used before injection of diphenhydramine, soreness will not be noticed.

Suggestion:

Advise the patient PRIOR to the injection that it may be uncomfortable during the drugs administration. Slow administration can minimize this but diphenhydramine does burn as it is injected.

If N₂O-0₂ is available, titrate N₂O to a level of sedation BEFORE the administration of the diphenhydramine / epinephrine, and maintain the patient on N₂O-0₂ throughout the procedure.

The N₂O-0₂ will elevate the pain reaction threshold thus minimizing patient response to painful stimulation should the effect of the diphenhydramine be less than optimal

Dr Stanley F Malamed