

Vasoconstrictors							
Name	Proprietary Name	Chemical Structure	Mode of Action	Systemic Actions	Maximum Recommended Dose	Number of Cartridges	Concentrations
Epinephrine	Adrenalin	Acid salt (highly soluble in H ₂ O) Sodium bisulphate added as antioxidant to delay deterioration	Acts directly on alpha and beta adrenergic receptors (beta predominates)	Increase heart rate Increase contraction Increase myo. O ₂ Decrease in cardiac efficiency Vasoconstriction Bronchodilation CNS stimulation Metabolism increases O ₂ in all tissues Inc. blood sugar Eliminated in urine	Normal/Healthy Client: 0.2mg per appt. 1:50,000 -> 1:100,000 -> 1:200,000 -> Client with C/V Disease: 0.04mg/ per appt. 1:50,000 -> 1:100,000 -> 1:200,000 ->	5.5 11 22 1 2 4	1:50,000 (lidocaine) 1:100,000 (lidocaine, articaine) 1:200,000 (articaine)
Levonordefrin	Neocobefrin	Freely soluble in diluted acidic sol'n . Sodium bisulphate added	Direct alpha receptor stimulation (little beta activity) Only 15% as potent as epi.	Produce less cardiac and CNS stimulation; all actions are the same as epi. but to a lesser degree. Metabolizes same as epi.	For all clients: 1 mg/per appt of 1:20,000 levonordefrin	11	1:20,000 (Mepivacaine)

TOPICAL ANESTHETIC IN MAIN CLINIC: Xylonor Gel: - Lidocaine 5%, antibacterial due to cetrimide

- Contra-indications: clients allergic to lidocaine or to cetrimide (antiseptic)

- 15 grams/tube; MRD -> 4 grams

CONCENTRATION FORMULA: 1.8 ml/cart X # of cart's X concentration of agent = mg administered

(i.e.: 2 cart's containing 1:100,000 epi: 1.8 x 2 x 0.01 = 0.036 mg)

Epinephrine

1:50,000 = 0.02 mg

1:100,000 = 0.01 mg

1:200,000 = 0.005 mg

Levonordefrin

1:20,000 = 0.05 mg

(Permission to reproduce granted by: Kellie Leahul R.D.H and Krista Bryden R.D.H (2008); updated September, 2020)