Appendix.-Instructions for Home Use of Intranasal Lidocaine SUCCESSFUL TREATMENT DEPENDS ON PROPER TECHNIQUE !

Use the drops as soon as you know that you are having a migraine.

1. Lie down on your back with your shoulders just off the edge of a bed; your head must be dangling down so that the bridge of your nose is below the level of your throat (see illustration).



- 2. Turn your head 30° toward the side of the headache (if your headache is on both sides, the method will be repeated on the other side).
- 3. Insert just the tip of the syringe into the nostril (outer wall) on the side of the headache.
- 4. Slowly drip in 0.5 mL of medicine over about 30 seconds.
- 5. Keep your head down and turned to the side for another 30 seconds.
- If your headache is on both sides: repeat steps 2 through 6 with your head turned to the opposite side, placing the medicine now in the other nostril.
- You may now return your head to a flat position (not elevated on a pillow); but keep your head turned to the side of the headache. Stay lying down for another 1 to 2 minutes.
- 8. You may now sit up.

If you taste the medicine while you are dripping it in, your head is not down far enough. If your throat feels numb afterwards, do not eat or drink until the numbness has worn off.

If your headache gets better, but does not go away completely within 15 minutes, you may repeat steps 1 through 8. If the headache goes away, but comes back, lidocaine nose drops may be repeated any time within 24 hours.

REFERENCES

- Ryan R, Elkind A, Baker CC, Mullican W, DeBussey S, Asgharnejad M. Sumatriptan nasal spray for the acute treatment of migraine. Results of two clinical studies. *Neurology*. 1997;49:1225-1230.
- Kudrow L, Kudrow DB, Sandweiss JH. Rapid and sustained relief of migraine attacks with intranasal lidocaine: preliminary findings. *Headache*. 1995; 35:79-82.
- Maizels M, Scott B, Cohen W, Chen W. Intranasal lidocaine for treatment of migraine: a randomized, double-blind, controlled trial. JAMA. 1996;276: 319-321.
- 4. Headache Classification Committee of the International Headache Society. Classification and diagnostic criteria for headache disorders, cranial neuralgias and facial pain. *Cephalalgia*. 1988;8 (suppl 7):19-28.
- Fleiss JL. Statistical Methods for Rates and Proportions. 2nd ed. New York: John Wiley & Sons; 1981:276.
- 6. Plosker GL, McTavish D. Sumatriptan. A reappraisal of its pharmacology and therapeutic efficacy in the acute treatment of migraine and cluster headache. *Drugs*. 1994;47:622-651.
- The International 311C90 Long-term Study Group. The long-term tolerability and efficacy of oral zolmitriptan (Zomig, 311C90) in the acute treatment of migraine. An international study. *Headache*. 1998;38:173-183.
- 8. Sluder G. The anatomical and clinical relations of the sphenopalatine (Meckel's) ganglion to the nose and its accessory sinuses. *NY Med J.* 1909;28:293-298.
- 9. Moskowitz MA. Neurogenic inflammation in the pathophysiology and treatment of migraine. *Neurology*. 1993;43(suppl 3):S16-S20.
- 10. Moskowitz MA. The neurobiology of vascular head pain. Ann Neurol. 1984;16:157-168.
- Weiller C, May A, Limmroth V, et al. Brain stem activation in spontaneous human migraine attacks. *Nat Med.* 1995;1:658-660.
- 12. Suzuki N, Hardebo JE, Owman C. Trigeminal fibre