

# THE CANADIAN JOURNAL OF NEUROLOGICAL SCIENCES

# LE JOURNAL CANADIEN DES SCIENCES NEUROLOGIQUES

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# For the management of Vertigo in Meniere's disease



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- Reduces the number and severity of vertigo attacks<sup>9,10</sup>
- Suitable for long term management<sup>9,10</sup>
- Effective when other medications failed<sup>9,10</sup>
- Well tolerated<sup>2,3,4,9,10</sup>

#### REFERENCES

1. Hunt, W. H., and Fosbinder, R. J.: A study of some beta-2, and 4, pyridylalkylamines. *J. Pharmacol. & Exper. Therap.* 75:299 (August) 1942.
2. Horton, B. T., and von Leden, H.: Clinical use of beta-2-pyridylalkylamines. Part I. Proceedings of the Staff Meetings of The Mayo Clinic 37:692 (Dec. 5) 1962.
3. Bertrand, R. A.: Meniere's disease: Subjective and objective evaluation of medical treatment with betahistine HCl. *Acta oto-laryng. Supplement* 305:48, 1972.

4. Wilmot, T. J.: An objective study of the effect of betahistine hydrochloride on hearing and vestibular function tests in patients with Meniere's disease. *J. Laryng. & Otol.* 85:369 (April) 1971.
5. Snow, J. B., Jr., and Suga, F.: Labyrinthine vasodilators. *A.M.A. Arch. Otolaryng.* 97:365 (May) 1973.
6. Martinez, D. M.: The effect of Serc (betahistine hydrochloride) on the circulation of the inner ear in experimental animals. *Acta oto-laryng. Supplement* 305:29, 1972.
7. Anderson, W. D., and Kubicek, W. G.: Effects of betahistine HCl, nicotinic acid, and histamine on basilar blood flow in anesthetized dogs. *Stroke* 2:409 (July-August) 1971.
8. Kubicek, W. G. and Anderson, W. D.: Blood Flow Changes into the Dog Labyrinthine Arteries. Presented at the American Academy of Ophthalmology and Otolaryngology, Chicago, October 29–November 2, 1967.
9. Guay, R. M.: Meniere's disease (Preliminary report of a new treatment). *Applied Therapeutics* 12:25 (August) 1970.
10. Hommes, O. R.: A study of the efficacy of betahistine in Meniere's syndrome. *Acta oto-laryng. Supplement* 305:70, 1972.

#### PRESCRIBING INFORMATION

**DESCRIPTION AND CHEMISTRY:** SERC is the proprietary name for a histamine-like drug generically designated as betahistine hydrochloride.

**INDICATIONS:** SERC may be of value in reducing the episodes of vertigo in Meniere's disease. No claim is made for the effectiveness of SERC in the symptomatic treatment of any form of vertigo other than that associated with Meniere's disease.

**DOSAGE AND ADMINISTRATION:** The usual adult dosage has been one to two tablets (4 mg. each) administered orally three times a day.

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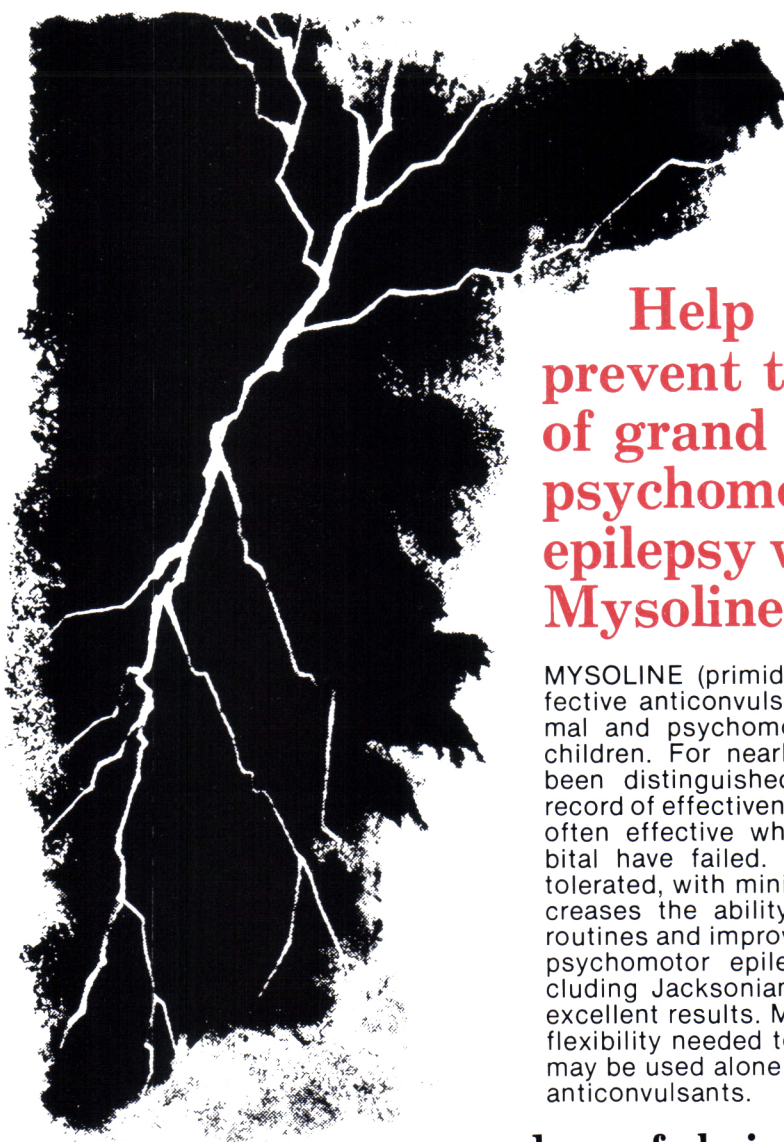
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