

April  
1994

# The Journal of Laryngology and Otology



Founded in 1887 by Morell Mackenzie & Norris Wolfenden

Edited by NEIL WEIR

Assistant Editors CAROL WENGRAF, RICHARD RAMSDEN, PETER RHŶS EVANS,  
DAVID PROOPS, VALERIE LUND, HENRY GRANT, ANDREW JONES & GUY KENYON

Book Review and Abstracts Editor JOHN B. BOOTH

Emeritus Advisor in Pathology IMRICH FRIEDMANN

isors in Pathology BRIAN MANNERS, CHRISTOPHER MILROY, KENNETH MACCLELLAND &  
LESLEY SMALLMAN

Advisor in Audiology LINDA LUXON

Advisors in Radiology GLYN LLOYD & PETER PHELPS

Advisors in Statistics ANTHONY HUGHES & PETER KELLY

Production Editors GILLIAN GOLDFARB & INGA MCKENZIE

Vol 108  
No 4

# The Journal of Laryngology and Otology

(Founded in 1887 by MORELL MACKENZIE and NORRIS WOLFENDEN)

Edited by NEIL WEIR

Assistant Editors CAROL WENGRAF, RICHARD RAMSDEN, PETER RHÛS EVANS,  
DAVID PROOPS, VALERIE LUND, HENRY GRANT, ANDREW JONES & GUY KENYON  
Book Reviews and Abstracts Editor JOHN B. BOOTH

Production Editors GILLIAN GOLDFARB & INGA MCKENZIE

## INSTRUCTIONS FOR AUTHORS

1. Original articles which have not been published elsewhere are invited and should be sent to the Editor. They are considered for publication on the understanding that they are contributed to this *Journal* solely. Reproduction elsewhere, in whole or in part, is not permitted without the previous written consent of the Author and Editor and the customary acknowledgement must be made. Normally an original main article should not exceed 7500 words.

Longer articles or theses will be considered for publication as *Supplements*, at the expense of the authors or their employing authorities.

2. Manuscripts should be **typewritten in duplicate** on one side of the paper only (A4 297x210 mm) and double spaced, with wide margins.

Begin each component on a new page in the following sequence: title page, abstract, text, acknowledgements, references, tables and legends.

(a) **Abstract**—This should contain not more than 150 words and include a statement of the problem, the method of study, results and conclusions; a 'summary' section should **not** be included in the main manuscript.

(b) **Key Words**—only those appearing as Medical Subject Headings (MeSH) in the supplement to the Index Medicus may be used; where no appropriate word(s) are listed those dictated by common sense/usage should be supplied.

(c) **Text**—Suggested outline—(1) introduction, (2) materials and methods, (3) results, (4) discussion, (5) conclusion.

(d) **Tables** are adjuncts to the text and should not repeat material already presented.

(e) **Illustrations**—Two sets of illustrations, one with each copy of the manuscript, must be submitted and all authors should remember that the single column width is 80mm. One set of illustrations should, therefore, not exceed this width and they should ensure that the essential features are illustrated within this dimension.

Coloured illustrations will be charged to authors, unless a special grant is authorized by the Editor.

Written permission from the publisher must be provided to the *Journal* in order to republish material with copyright elsewhere and also from the senior author where necessary.

(f) **Measurements** must be in metric units, with *Système Internationale* (SI) equivalents given in parentheses.

(g) **References**—For *Journal* articles, The Harvard system of recording references should be used, e.g. Green, C. and Brown, D. (1951) The tonsil problem. *Journal of Laryngology and Otology* 65: 33–38. A paper written by more than two authors should be abbreviated in the text, e.g. Green *et al.* (1951), but **all** the authors should be given in the list of references. The titles of all Journals should be given without abbreviation. **References should be listed in alphabetical order**; use of the Vancouver system will **not** be accepted.

For single-author books, the following style should be used: Green, C. (1951) *The tonsil problem*, 2nd Edition, vol. 1, Headley Brothers Ltd., Ashford, Kent, pp 33–38.

For papers in multi-author books with one or more editors, the reference should include the title of the chapter and the names of the editors, together with the number of the edition as eg: Brown, D. (1951) Examination of the ear. In *Diseases of the Ear, Nose and Throat*. 2nd Edition. (White, A., Black, B., eds.), Headley Brothers Ltd, Ashford, Kent, pp 33–38.

**It is most important that authors should verify personally the accuracy of every reference before submitting a paper for publication. The names of authors cited in the References should be given in alphabetical order.**

(h) **Drugs**—The proper names of drugs must be used. One reference can be made to the brand name if it is felt to be important to the study.

(i) **Meetings**—If the manuscript was presented at a meeting, the place where it was held, and the date on which it was read must be included and should appear at the foot of the title page.

(j) **Financial disclosures**—In the submission letter to the Editor, the authors must list all affiliations with or financial involvement in, organizations or entities with a direct financial interest in the subject matter or material of the research discussed in the manuscript.

(k) **Declaration**. Each manuscript must be accompanied by a letter of declaration to be signed by each author to confirm that they have seen, read and approve the contribution bearing their name.

(l) **Rejections**—All manuscripts which are rejected will no longer be returned to the authors. Those submitting papers should, therefore, ensure that they retain at least one copy and the reference numbers, if any, of the illustrations. The only exception to this will be those manuscripts with colour illustrations which will be returned *automatically* by Surface Mail.

(m) **Facsimile (FAX)**. All authors should send a Facsimile number whenever possible to speed communication; this particularly applies to those outside the United Kingdom. Manuscripts with no visual illustrations (X-rays/pathology) may be sent by facsimile.

3. Page proofs are sent to authors for corrections, which should be kept to a minimum; they must be clearly marked, and no extra matter added. Proofs should be returned within 5 days.

4. Orders for reprints must be sent when returning page proofs, and for this purpose special forms are supplied.

5. Editorial communications may be addressed to **The Editor, Journal of Laryngology and Otology, c/o Headley Brothers Ltd., The Invicta Press, Ashford, Kent TN24 8HH or sent by FAX (0483 451874).**

6. **The annual subscription is £95.00 Institutions & Libraries US\$190.00; £85.00 Individuals US\$170.00; £45.00 Registrars, Residents and Interns.** (Those in training should submit a certificate from The Head of the Department giving details of their appointment; those who qualify must supply their *home* address for mailing direct). Claims to be made for missing issues within 6 months of each publication date.

7. Single copies of current or back numbers (when available) will be on sale at £12.00 each (including postage).

8. **SUPPLEMENTS** published at 'irregular' intervals with subscription, available separately on request.

9. All subscriptions, advertising and business communications should be sent to the publishers, or subscription agents.

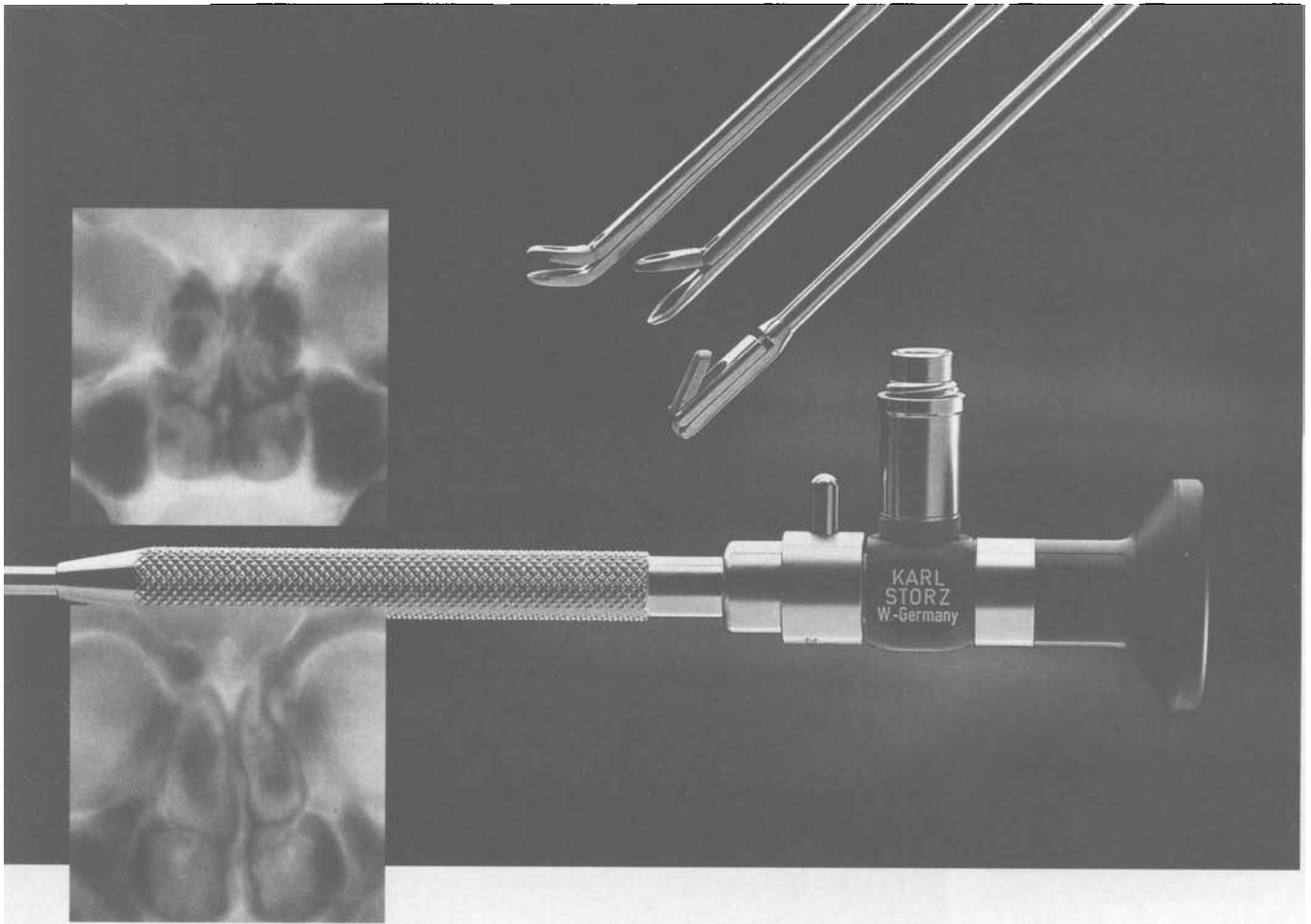
**HEADLEY BROTHERS LTD,**  
THE INVICTA PRESS, ASHFORD, KENT.  
© *Journal of Laryngology and Otology Ltd., 1994*  
ISSN 0022-2151

Second class postage paid Rahway, N.J.

Postmaster: Send address corrections to The Journal of Laryngology and Otology, c/o Mercury

Airfreight International Ltd. Inc., 2323 Randolph Avenue, Avenel, N.J. 07001. Frequency of Publication: Monthly.

# Functional Endoscopic Nasal and Paranasal Surgery



Functional endoscopic paranasal surgery has nowadays acquired worldwide recognition as a technique which can achieve maximum success in treatment with minimum traumatization of the patient. This is not least due to the possibilities of precision endoscopic diagnostics which, in conjunction with CT, permit causal therapy. Instruments developed by KARL STORZ have facilitated this technique from the very beginning. Hopkins rod lens telescopes ensure an excellent overview; specially developed in-

struments also allow high-precision, atraumatic procedures in the confined nasal cavities. Anyone who is nowadays committed to functional endoscopic paranasal surgery should not be without the experience incorporated in every instrument manufactured by KARL STORZ.

United Kingdom agents:

**Rimmer Brothers**  
 Aylesbury House  
 Clerkenwell Green  
 London  
 EC1R 0DD  
 Tel: 071-251 6494

**STORZ**  
 KARL STORZ — ENDOSKOPE

KARL STORZ GMBH & CO.  
 Mittelstr. 8, Postfach 230  
 D-7200 Tuttlingen/West Germany  
 Cable: Endoskopie •  
 Phone: (07461) 7080, Telex: 762656 storz d  
 Teletex: 746 118, Telefax: (07461) 708105

KARL STORZ Endoscopy - America, Inc.  
 10111 W. Jefferson Boulevard, Culver City,  
 California 90232-3578, Phone: (213) 558 1500,  
 Telex: 910-340-6372 k storz culv.  
 Telefax: 213 280 2504

KARL STORZ Endoscopia Latino-America  
 815 N.W. 57 AV, Suite No. 342  
 Miami, Florida 33126  
 Phone: KSLA (305) 262 - 8980  
 Telex: 510 601 6506, Telefax: (305) 262 - 8986

For more information please send me  
 the catalogue  
 ENT

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

HNO 12



#### Abridged Prescribing Information.

**Presentation:** *Rhinocort Aqua*: A metered pump spray delivering 100 µg budesonide per dose. *Rhinocort Nasal Aerosol*: A metered dose aerosol delivering 50 µg budesonide per dose. **Uses:** Seasonal and perennial allergic rhinitis and vasomotor rhinitis. **Dosage:** *Adults (including elderly)*: 400 µg once daily in the morning, or 200 µg twice daily, morning and evening. When good effect has been achieved, reduce dose. *Children:* *Rhinocort Aqua*: Not recommended. *Children over 6 years*: use *Rhinocort Nasal Aerosol*, dosage as for adults. **Contra-indications, warnings etc.:** Hypersensitivity to any of the ingredients. Special care demanded when treating patients transferred from oral steroids, where disturbances of hypothalamic-pituitary-adrenal (HPA) axis could be expected. Special care needed in patients with fungal and viral infections in the airways, or with lung tuberculosis. Full effect not achieved until after a few days' treatment. Treatment of seasonal rhinitis should start, if possible, before exposure to the allergens. Concomitant treatment may sometimes be necessary to counteract eye symptoms. In continuous, long-term treatment, the nasal mucosa should be inspected regularly. Continuous, long-term treatment of children is not recommended. *Rhinocort* does not affect ability to drive and operate machinery. Avoid during pregnancy. **Side-effects:** Sneezing, nasal stinging and dryness may follow immediately after use of spray. Slight haemorrhagic secretion may occur. Contact allergy involving facial skin may occur rarely. Rare cases of cataract after prolonged use have been reported. Ulceration of mucous membrane and nasal septal perforation have been reported rarely. **Package quantities and NHS cost:** *Rhinocort Aqua* — 100 x 100 µg doses budesonide INN — £6.00. *Rhinocort Nasal Aerosol* — 200 x 50 µg doses — £5.66. **Product licence No.:** 0017/0304 — *Rhinocort Aqua*. 0017/0204 — *Rhinocort Nasal Aerosol*. **Legal category:** POM. **Further information is available from:** Astra Pharmaceuticals Ltd., Home Park, Kings Langley, Herts WD4 8DH.

#### References:

1. Bhatia M *et al.* *Curr Med Res Opin* 1991; **12** (5): 287-296.
2. Pipkorn U, Rundcrantz H. *Eur J Resp Dis* 1982; **63** (122): 211-220.
3. Pipkorn U. *Rhinology* 1983; **21**: 335-340.
4. Samuelsson A. *Folia Allergologica et Immunologica Clinica* 1983; **XXX** (Suppl. al No.4): 102.
5. Simpson RJ *et al.* *Allergy* 1988; **43** (7): 112.
6. McArthur JG. *Allergy* 1988; **43** (7): 114.
7. Sykes CG, Stoker MJ. *Eur Ac Allergol Clin Immunol*, Stockholm 1985; (abs 217).
8. Vanzielegheem MA *et al.* *J Allergy Clin Imm* 1986; **77**: 136.
9. Vanzielegheem MA *et al.* *J Allergy Clin Imm* 1987; **79**: 887-892.
10. Penttilä M *et al.* *Rhinology* 1988; **26** (1): 148.
11. Bunnag C, Jareoncharsri P, Wong ECK. *Allergy* 1992; **47**: 313-317.
12. Bende M, Rundcrantz H. *ORL* 1985; **47**: 303-306.
13. Skinner D, Basran G. *Physician* 1991; Jun: 233-235.
14. McGivern DV *et al.* *Eur Ac Allergol Clin Immunol*, Stockholm 1985; (abs 215).
15. Olson O, Samuelsson A. *Acta Otolaryngol* (Stockholm) 1984; Suppl. **412**: 125.
16. Synnerstad B *et al.* *Eur Ac Allergol Clin Immunol*, Stockholm 1985; **216**: 239.
17. Synnerstad B *et al.* 11th ERS Congress and 5th ISIAN Athens - Greece, 15-18 June 1986: 18-19.
18. Lindqvist N *et al.* *Allergy* 1986; **41**: 179-186.

**ASTRA**  
Astra Pharmaceuticals

Astra Pharmaceuticals Ltd.,  
Home Park, Kings Langley, Herts WD4 8DH.  
Telephone: 0923 266191.

RHA 803/04/93

Date of preparation: April 1993

\* Efficacy demonstrated in references 1 to 18 inclusive.

BUDESON

# Clear allergi



● The effectiveness of budesonide has been  
in both seasonal<sup>1-10</sup> and perennial<sup>11-18</sup>

● 74% of patients have stated

*Rhinocort Aqua* once-



IDE FOR THE NOSE

# relief in allergic rhinitis

demonstrated  
in a study of  
once-daily vs. twice-daily dosing in  
allergic rhinitis.  
There was a preference for  
once-daily dosing  
a preference for  
once-daily dosing  
daily against twice-daily dosing.<sup>1</sup>





Month after Month,  
Cover to Cover  
*The BEST in Otolaryngology*

THE  
**Laryngoscope**  
FOUNDED IN 1896

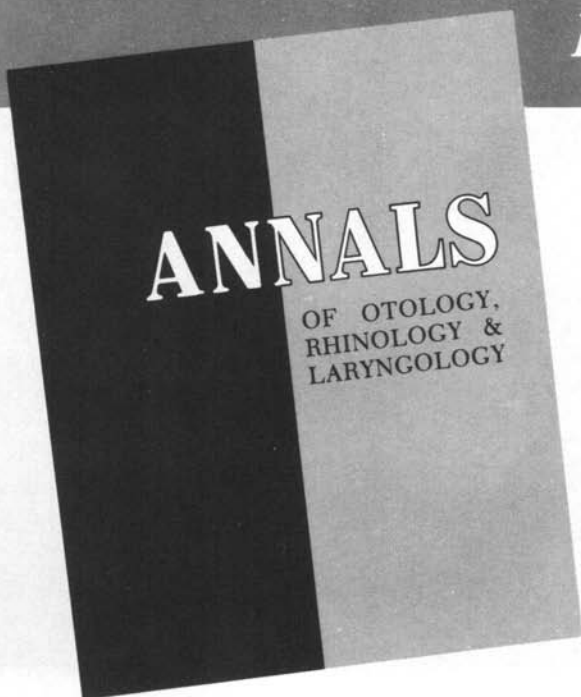
J. Gershon Spector, M.D.  
Editor

10 So. Broadway • Suite 1401  
St. Louis, MO 63102



U.S. \$110.00 per year      Outside U.S. \$135.00 per year  
Institutional Rate: U.S. \$150.00 per year • Outside U.S. \$175.00 per year

*INVEST IN YOURSELF*



OFFICIAL JOURNAL OF THE  
AMERICAN LARYNGOLOGICAL ASSOCIATION

1994 ANNUAL SUBSCRIPTION RATES

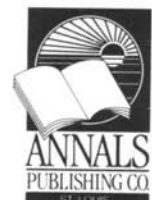
	RESIDENT*	INDIVIDUAL*	INSTITUTIONAL
US	<input type="checkbox"/> \$52.00	<input type="checkbox"/> \$ 99.00	<input type="checkbox"/> \$148.50
FOREIGN	<input type="checkbox"/> \$64.00	<input type="checkbox"/> \$119.00	<input type="checkbox"/> \$168.50

\*Individual, resident, and student subscriptions must be in the individual's name and must be billed to and paid for by the individual.

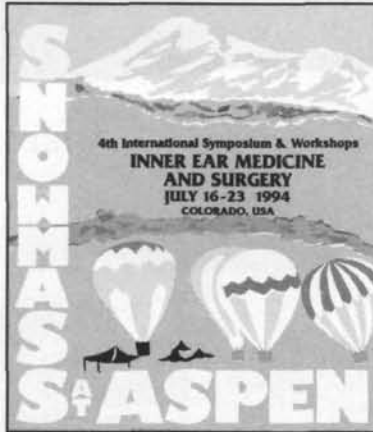
NEW SUBSCRIBERS RECEIVE 2 ISSUES  
FREE WITH PAID SUBSCRIPTION



Mail to or call:  
ANNALS PUBLISHING CO  
4507 LACLEDE AVENUE  
ST LOUIS, MISSOURI 63108  
(314) 367-4987  
FAX (314) 367-4988



- MONTHLY ISSUES • SUPPLEMENTS
- PEER REVIEWED • CLINICAL AND RESEARCH
- IMAGING CASE STUDIES • PATHOLOGY CONSULTATIONS
- LETTERS TO THE EDITOR • BOOK REVIEWS



Organized by the Prosper Meniere Society

## 4<sup>th</sup> International Symposium & Workshops INNER EAR MEDICINE & SURGERY JULY 16-23 1994

*Snowmass/Aspen Colorado USA*

Co-Sponsors: International Meniere's Disease Research Institute-IMDRI  
and the Colorado Neurological Institute (CNI) at  
Swedish Medical Center, Englewood, CO USA

### GUESTS OF HONOR

UGO FISCH, MD Zurich, SWITZERLAND  
HOWARD P. HOUSE, MD Los Angeles, CA USA  
BRIAN F. McCABE, MD Iowa City, IA USA  
ANDREW MORRISON, FRCS London, England UK

### Call for Papers

TOPICS: Viral Immune Inner Ear Disease \*Middle Ear/Inner Ear Endoscopies & Lasers \*Imaging of the Inner Ear, Vestibular Aqueduct & 8th Nerve \* Diagnostic Electrocochleography (ECoG) \*Intraoperative ECoG Monitoring \*Otoacoustic Emissions(OAE) \*Innovative Approaches in Neurotology \*Inner Ear Fluid Dynamics & Pathophysiology \*Diagnosis & Natural History of Meniere's Disease \*Endo-lymphatic Hydrops \*Perilymph Fistulas & Leaky Ears \* NonDestructive Inner Ear Surgery \*Vestibular Nerve Section & Labyrinthectomy \*Cochlear Implants

\* *George E. Shambaugh, Jr. MD: Study Group for Inner Ear ImmuneAllergic Disorders & Hydrops*

Meeting Coordinators: Jane Wells, Apryl Salz or Kay Mack.

MAIL: I. Kaufman Arenberg, MD. Executive Director/Program Chairman

**IMDRI**

300 E. Hampden Ave., Suite 401, Englewood Colorado 80110 USA

PHONE: (303) 788-4230 or (303) 781-7223. FAX: 303/788-4234.

*For Advertisement Rates and Space  
in this Journal apply to*

The Advertisement  
Manager

THE JOURNAL OF  
LARYNGOLOGY  
AND OTOTOLOGY

Headley Brothers Limited  
The Invicta Press  
Ashford  
Kent TN24 8HH  
Tel: (0233) 623131



## Twentieth International Workshop

ON TISSUE-INTEGRATED IMPLANTS  
IN CRANIOFACIAL REHABILITATION  
AND AUDIOLOGY

by The Unit for Craniofacial Implants  
Department of Otolaryngology, Sahlgren's Hospital  
University of Göteborg, Sweden

October 5-7, 1994

This three-day workshop will include:

Principle aspects of osseointegration	Live surgery with participants in OR
Bone Biology and Interface Zone theories	Patient demonstrations
Practical training for the surgical procedure	The Bone Anchored Hearing Aid
	Laboratory procedures for craniofacial prosthesis

### Workshop Directors:

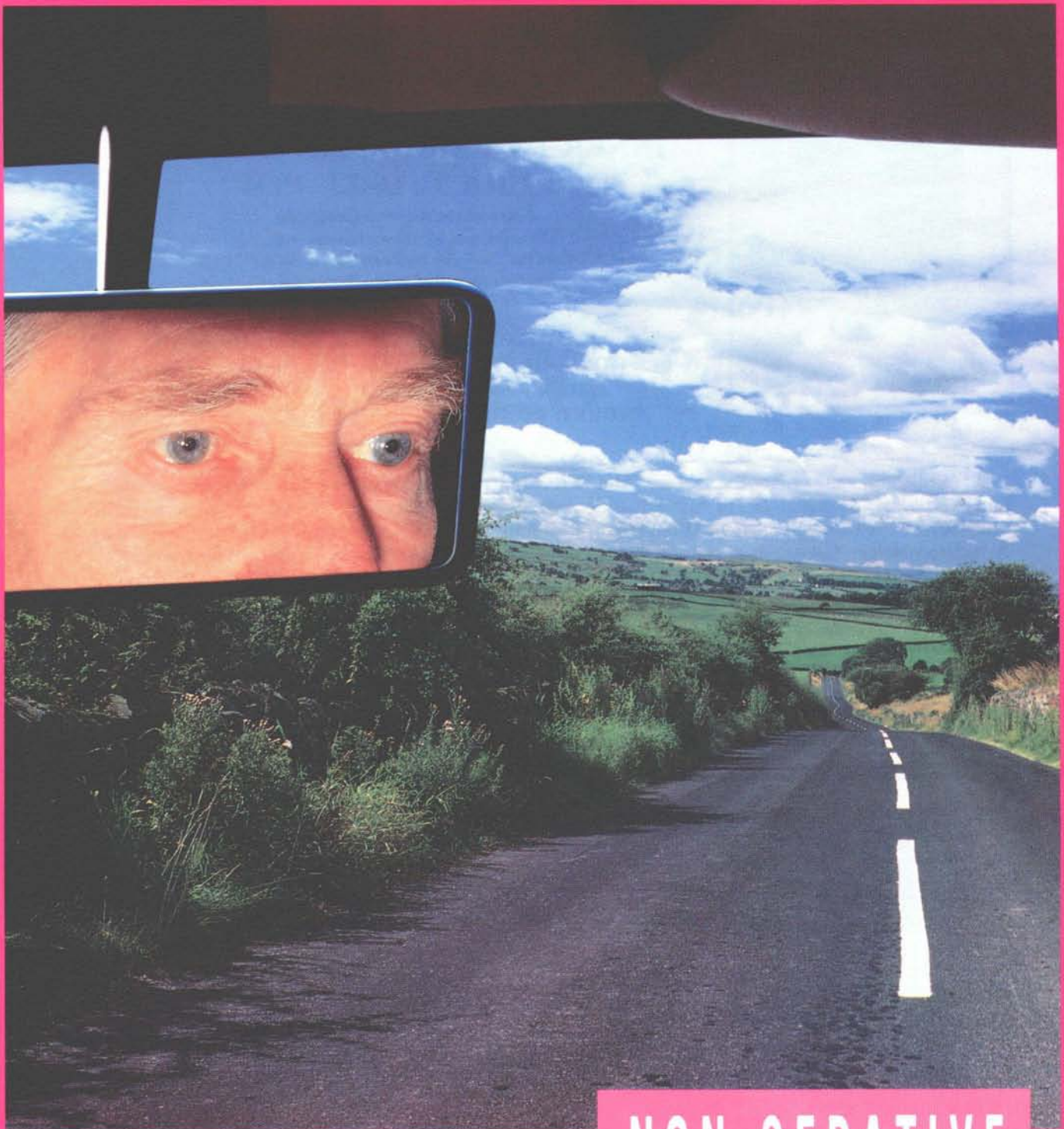
Anders Tjellström, M.D., Ph.D.  
Gösta Granström, M.D., D.D.S., Ph.D.  
Kerstin Bergström, CDT.

For further information contact:  
Anders Tjellström, M.D., Ph.D.,  
Department of Otolaryngology,  
Sahlgren's Hospital, University of Göteborg,  
Göteborg, Sweden.

Tel: int - 46-31-603504

Fax: int - 46-31-416734





Recurrent vertigo under control means that patients can continue with their normal daily activities.

With non-sedative Serc-16, driving can be a part of that way of life — because new evidence has shown that even high doses of Serc (72mg tds) did not impair driver performance.<sup>1</sup>

Prochlorperazine (5mg tds), however, caused a significant deterioration in driving skills, of which the drivers themselves were unaware.<sup>1</sup>

The way ahead is now clear for your patients with recurrent vertigo — R<sub>x</sub> Serc-16 1 tds.

NON-SEDATIVE

**Serc-16**

betahistine 16mg

**THE WAY AHEAD IN RECURRENT VERTIGO**  
due to Ménière's syndrome

Reference 1. Betts TA et al. *Br J Clin Pharmacol* 1991; 32: 455-458

**Prescribing information:**

**Presentation** A white, flat round tablet imprinted '267' on one face, 'DUPHAR' on the reverse, each tablet containing 16mg betahistine dihydrochloride. Available in packs of 84 tablets. Basic NHS price £18.03. **Indications** Vertigo.

**Administration** Adults: Initially one tablet three times daily, taken preferably

with meals. Maintenance dose: 24-48mg daily. Children: No dosage recommendations are made for children. **Contra-indications, Warnings, etc.** Contra-indications: Pheochromocytoma. Precautions: Caution is advised in the treatment of patients with a history of peptic ulcer. Clinical intolerance to Serc in bronchial asthma patients has been shown in a relatively few patients and therefore caution should be exercised when administering betahistine to them. The usual precautions should be observed when administering Serc to patients in pregnancy. **Side-effects:** Relatively

few side-effects have been reported. They include gastrointestinal upset (including dyspepsia), headache, skin rash and pruritus. **Product Licence Number** GS12/0088. **Legal Category** POM. **Date of Preparation** February 1993. Further information is available from: Duphar Laboratories Limited, Gaters Hill, West End, Southampton SO3 3JD. Tel: 0703 472281. Duphar, a member of the Solvay Group.

**duphar**

Rx 1 tds