

THE CANADIAN JOURNAL OF

Neurological Sciences

LE JOURNAL CANADIEN DES

Sciences Neurologiques

AN INTERNATIONAL JOURNAL / UN JOURNAL INTERNATIONAL

REVIEW ARTICLE

- 167 Excitation and Inhibition in Epilepsy
Jerome Engel, Jr

ORIGINAL ARTICLES

- 175 The Efficacy of Retrograde Infusion with LY231617 in a Rat Middle Cerebral Artery Occlusion Model
Nobuhiro Inoue, Y Lucas Yamamoto, Yasushi Ito, James A Clemens, Jill K Panetta and Mirko Diksic
- 184 Epidemiological Study of Ruptured Intracranial Aneurysms in the Saguenay-Lac-Saint-Jean region (Quebec, Canada)
Jean Mathieu, Louis Pérusse, Pierre Allard, Claude Prévost, Léo Cantin, Jean-Marie Bouchard and Marc DeBraekleer
- 189 Risk Factors for Peak Dose Dyskinesia in 100 Levodopa-treated Parkinsonian Patients
Pierre J Blanchet, Pierre Allard, Laurent Grégoire, François Tardif and Paul J Bédard
- 194 Localizing Muscles for Botulinum Toxin Treatment of Focal Hand Dystonia
C Geenen, E Consky and P Ashby
- 198 Perioperative Problems in Parkinson's Disease and Their Management: Apomorphine with Rectal Domperidone
Néstor Gálvez-Jiménez and Anthony E Lang
- 204 Focal Midbrain Glioma: Long Term Survival in a Cohort of 16 Patients and the Implications for Management
Mark G Hamilton, Carl Laurysen and Neil Hagen
- 208 Triphasic Waves During Post-Ictal Stupor
Abayomi Ogunyemi
- 213 Functional MRI Localization of Language in a 9-Year-Old Child
RR Benson, WJ Logan, GR Cosgrove, AJ Cole, H Jiang, LL LeSueur, BR Buchbinder, BR Rosen and VS Caviness, Jr
- 220 Listeria Spinal Cord Abscess – Clinical and MRI Findings
Joseph Y Chu, Walter Montanera and Robert A Willinsky
- 224 Headache and Scalp Edema in Sickle Cell Disease
Giovanna Pari and Hyman M Schipper
- 227 Peridontoid Synovial Cyst Causing Cervico-medullary Compression
Anthony M Kaufmann, William C Halliday, Michael West, Derek Fewer and Ian Ross

NEUROLOGICAL PRACTICE

- 231 Neurology and the Community - 1995 Richardson Lecture
TJ Murray

(complete contents page i)

**32nd CANADIAN
CONGRESS OF
NEUROLOGICAL
SCIENCES**

June 24 - 28, 1997

Saskatoon, Saskatchewan

With Epival, it can be.

Because Epival has been proven effective in primary generalized epilepsy,^{1,3}
as well as in partial seizures that secondarily generalize.^{4,5*}

Epival has been associated with little effect on learning and cognition.⁶

Drowsiness, visual disturbances, and ataxia are rarely noted⁷ — unlike phenytoin and carbamazepine.⁸ Epival is generally well tolerated in properly screened patients,⁷ causing less GI irritation (nausea, vomiting and indigestion) than valproic acid.⁹

With Epival, your epilepsy patients can be confident that they most likely appear to be just like anyone else. Because there's more to anticonvulsant therapy than seizure control.

THIS SHOULD BE THE ONLY INDICATION THEY HAVE EPILEPSY.




Epival[®]
(divalproex sodium)

HELPS PUT PATIENTS BACK IN CONTROL.

* For use as sole or adjunctive therapy in the treatment of simple or complex absence seizures, including petit mal and is useful in primary generalized seizures with tonic-clonic manifestations. EPIVAL may also be used adjunctively in patients with multiple seizure types which include either absence or tonic-clonic seizures.

† Monitoring of hepatic function and blood coagulation is advised.

 PHARMACEUTICAL PRODUCTS DIVISION
ABBOTT LABORATORIES, LIMITED
SAINT-LAURENT, QUÉBEC

© Abbott Laboratories, Limited 
Product Monograph available on request.

For brief prescribing information see pages xvii, xviii.

THE CANADIAN JOURNAL OF
Neurological Sciences
LE JOURNAL CANADIEN DES
Sciences Neurologiques

- REVIEW ARTICLE **167** Excitation and Inhibition in Epilepsy
Jerome Engel, Jr
- ORIGINAL ARTICLES **175** The Efficacy of Retrograde Infusion with LY231617 in a Rat Middle Cerebral Artery Occlusion Model
Nobuhiro Inoue, Y Lucas Yamamoto, Yasushi Ito, James A Clemens, Jill K Panetta and Mirko Diksic
- 184** Epidemiological Study of Ruptured Intracranial Aneurysms in the Saguenay-Lac-Saint-Jean region (Quebec, Canada)
Jean Mathieu, Louis Pérusse, Pierre Allard, Claude Prévost, Léo Cantin, Jean-Marie Bouchard and Marc DeBraekleer
- 189** Risk Factors for Peak Dose Dyskinesia in 100 Levodopa-treated Parkinsonian Patients
Pierre J Blanchet, Pierre Allard, Laurent Grégoire, François Tardif and Paul J Bédard
- 194** Localizing Muscles for Botulinum Toxin Treatment of Focal Hand Dystonia
C Geenen, E Consky and P Ashby
- 198** Perioperative Problems in Parkinson's Disease and Their Management: Apomorphine with Rectal Domperidone
Néstor Gálvez-Jiménez and Anthony E Lang
- 204** Focal Midbrain Glioma: Long Term Survival in a Cohort of 16 Patients and the Implications for Management
Mark G Hamilton, Carl Laurysen and Neil Hagen
- 208** Triphasic Waves During Post-Ictal Stupor
Abayomi Ogunyemi
- 213** Functional MRI Localization of Language in a 9-Year-Old Child
RR Benson, WJ Logan, GR Cosgrove, AJ Cole, H Jiang, LL LeSueur, BR Buchbinder, BR Rosen and VS Caviness, Jr
- 220** Listeria Spinal Cord Abscess – Clinical and MRI Findings
Joseph Y Chu, Walter Montanera and Robert A Willinsky
- 224** Headache and Scalp Edema in Sickle Cell Disease
Giovanna Pari and Hyman M Schipper
- 227** Peridontoid Synovial Cyst Causing Cervico-medullary Compression
Anthony M Kaufmann, William C Halliday, Michael West, Derek Fewer and Ian Ross
- NEUROLOGICAL PRACTICE **231** Neurology and the Community - 1995 Richardson Lecture
TJ Murray
- CORRESPONDENCE **234** Re: Isolated Supranuclear Nerve Palsy: A Review of Nine Cases
Asa J Wilbourn
- 234** Reply
Henry Berry
- Books Received **235**
 Book Reviews **235**
 Notes and Announcements **242**
 Calendar of Events **243**
 Information for Authors **xiv**
 Advertisers Index **xxix**

THE CANADIAN JOURNAL OF

Neurological Sciences

LE JOURNAL CANADIEN DES

Sciences Neurologiques

Editor/Rédacteur en chef

James A. Sharpe TORONTO, ON

Associate Editors/Rédacteurs associés

Laurence E. Becker TORONTO, ON

John P. Girvin LONDON, ON

John R. Wherrett TORONTO, ON

Past Editors

Robert G. Lee CALGARY, AB

Robert T. Ross WINNIPEG, MB

(founding editor)

Editorial Board/Conseil Scientifique

Jack P. Antel MONTREAL, QC

Warren T. Blume LONDON, ON

Peter R. Camfield HALIFAX, NS

Pierre Duquette MONTRÉAL, QC

Peter J. Dyck ROCHESTER, MN, USA

Andrew A. Eisen VANCOUVER, BC

Julian T. Hoff ANN ARBOR, MI, USA

Renn Holness HALIFAX, NS

Peter Humphreys OTTAWA, ON

George Karpati MONTRÉAL, QC

Patrick L. McGeer VANCOUVER, BC

John H. Noseworthy ROCHESTER, MN, USA

C. Warren Olanow NEW YORK, NY, USA

William Pryse-Phillips ST. JOHNS, NF

Ali H. Rajput SASKATOON, SK

James T. Rutka TORONTO, ON

Alan M. Smith MONTRÉAL, QC

Garnette R. Sutherland CALGARY, AB

Jean-Guy Villemure MONTRÉAL, QC

Douglas W. Zochodne CALGARY, AB

Book Review Editor / Rédacteur de critiques de livres

Mary Anne Lee CALGARY, AB

News Editor/Rédacteur (nouvelles)

John W. Norris TORONTO, ON

Managing Editor/Administratrice adjointe

Sally A. Gregg CALGARY, AB

Publications Committee/Comité de Rédaction

Pierre Langevin STE-FOY, QC

Donald Brunet KINGSTON, ON

Mark Hamilton CALGARY, AB

Andrew Kertesz LONDON, ON

The official journal of: / La Revue officielle de:

The Canadian Neurological Society
La Société Canadienne de Neurologie

The Canadian Neurosurgical Society
La Société Canadienne de Neurochirurgie

The Canadian Society of Clinical Neurophysiologists
La Société Canadienne de Neurophysiologie Clinique

The Canadian Association of Child Neurology
L'Association Canadienne de Neurologie Pédiatrique

The permanent secretariat for the four societies and the Canadian Congress of Neurological Sciences is at/
Le secrétariat des quatre associations et du Congrès Canadien des Sciences Neurologiques est situé en permanence à:
810, 906 - 12 Avenue S.W., Calgary, AB Canada T2R 1K7

The Canadian Journal of Neurological Sciences is published quarterly. The annual subscription rate is \$65 for members; \$75 for non-members in Canada; \$85 for USA and elsewhere. Residents, Interns, Pre- and Post-Doctoral Students \$32.50 per annum (members); \$37.50 per annum (non-members). Single copies \$20 each plus postage and handling. All manuscripts and communications should be sent to: Canadian Journal of Neurological Sciences, P.O. Box 4220, Station C, Calgary, AB Canada T2T 5N1. Courier to: 810, 906 - 12th Avenue S.W., Calgary, AB Canada T2R 1K7. Telephone (403) 229-9575; Fax (403) 229-1661. E-mail: cjns@canjneurosci.org

COPYRIGHT © 1996 by THE CANADIAN JOURNAL OF NEUROLOGICAL SCIENCES INC. No part of this journal may be reproduced in any form without the prior permission of The Canadian Journal of Neurological Sciences. Mailed under Publications Mail registration number 3307. Postage paid at Calgary, Alberta. This journal is indexed by *Index Medicus*, *Excerpta Medica* and *Current Contents — Clinical Practice and Life Sciences*, *Current Awareness in Biological Sciences*.

Le Journal Canadien des Sciences Neurologiques est publié trimestriellement. L'abonnement annuel est de 65 \$ pour les membres; 75 \$ pour les non-membres au Canada; 85 \$ pour les Etats Unis et ailleurs. Internes, résidents, fellows pré et post doctoral: 32,50 \$ par année (membres); 37,50 \$ par année (non-membres). Copie simple: 20 \$ plus affranchissement et manutention. Toutes les communications et les manuscrits doivent être adressés à Journal Canadien des Sciences Neurologiques, P.O. Box 4220, Station C, Calgary, AB Canada T2T 5N1. Par courrier: 810, 906 - 12th Avenue S.W., Calgary, AB Canada T2R 1K7. Téléphone (403) 229-9575; Fax (403) 229-1661. E-mail cjns@canjneurosci.org
DROITS D'AUTEUR © 1996: THE CANADIAN JOURNAL OF NEUROLOGICAL SCIENCES INC. Aucune partie de ce Journal ne peut être reproduite, sous quelque forme que ce soit, sans la l'autorisation du Journal Canadien des Sciences Neurologiques. Posté sous permis de poste-publications no 3307. Port payé à Calgary, Alberta. Le Journal est cité et indexé dans *Index Medicus*, *Excerpta Medica* et *Current Contents — Clinical Practice et Life Sciences*, *Current Awareness in Biological Sciences*.

Advertising representative/Représentant de publicité:
Sally Gregg, Canadian Journal of Neurological Sciences
810, 906 - 12 Ave. S.W., Calgary, AB Canada T2R 1K7
Tel (403) 229-9575 Fax (403) 229-1661
E-mail: cjns@canjneurosci.org

Printer/Imprimeur:

McAra Printing Limited, 105, 2507 - 12th Street N.E.,
Calgary, Alberta T2E 7L5

ISSN 0317 - 1671



**Maintenant,
Tegretol® (carbamazépine)
est aussi offert**

sous forme de

Suspension

Tegretol®

carbamazépine

Pour toutes les présentations du produit, consulter le guide thérapeutique.

On peut facilement reconnaître le jeune patient épileptique traité au Tegretol® CR.

Excellent contrôle des crises

Tegretol® CR (carbamazépine à libération contrôlée) maîtrise les crises chez de nombreux patients, causant peu d'impact sur la fonction cognitive^{1,2}. Tegretol CR permet à de nombreux patients de penser clairement et de donner le meilleur d'eux-mêmes^{1,2}.

Taux sanguins uniformes

Tegretol CR cause moins de «hauts et de bas» dans les taux sanguins que le Tegretol conventionnel. Les effets secondaires sont ainsi réduits et le modèle de fonction cognitive est plus stable.³

L'effet indésirable le plus communément signalé, lié à la carbamazépine, est la somnolence. Un tel effet ne se manifeste habituellement que durant la phase initiale du traitement⁴ mais on peut réduire son importance en administrant de la carbamazépine à libération contrôlée (TEGRETOL® CR).¹

Posologie b.i.d. commode

Lorsque vous instituez ou remplacez un traitement, pensez au Tegretol CR. Il est présenté en comprimés à 200 mg et 400 mg facilement divisibles pour une plus grande souplesse d'administration et améliorer l'observance du patient.



TEGRETOL® CR.

Aide les épileptiques à réaliser leur plein potentiel.

Pour documentation voir pages xix, xx.

iii

Geigy Spécialités pharmaceutiques
Dorval (Québec) H9S 1B1 ou
Mississauga (Ontario) L5N 2W5

PMAC
MTH
PARB
CTP
6-9517F

Lamictal
Adjunctive Antiepileptic Therapy

Control over a wide with a low CNS



[†]Withdrawal rates ($\geq 0.6\%$): dizziness 2.4%, headache 1.3%, nausea 1.3%, blurred vision 1.1%, rash 1.1%, diplopia 0.7%, ataxia 0.6%. If there is any unexplained rash, fever, flu-like symptoms or worsening of seizure control, then hepatic, renal and clotting parameters should be monitored. See Product Monograph for recommendations when prescribing for geriatric patients and for patients with impaired renal and/or liver function. Serious skin-related events may be related to rapid initial titration of dosing and use of concomitant valproic acid.

[‡]As with most other AEDs, before prescribing LAMICTAL, refer to Product Monograph for possible drug interactions with other AEDs.

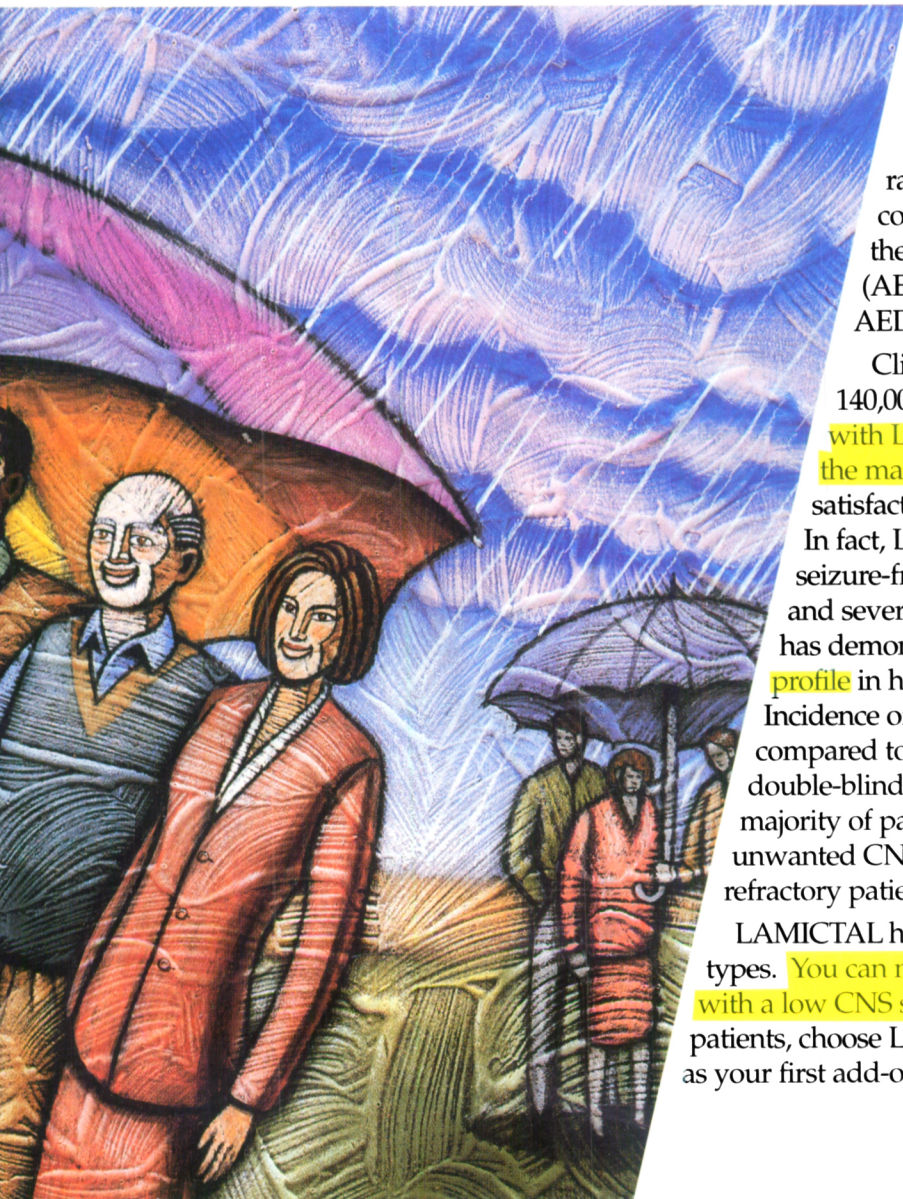
GlaxoWellcome

Glaxo Wellcome Inc.

®Registered trademark of The Wellcome Foundation Limited, Glaxo Wellcome Inc. licensed use.

PAAB
CCPP

range of seizure types, side-effect profile



Many patients with epilepsy – across a wide range of seizure types – are unsatisfactorily controlled with conventional therapies.¹ Now there's LAMICTAL, a novel antiepileptic drug (AED) that is chemically unrelated to all other AEDs in current use.^{1,2}

Clinical trials and worldwide experience in over 140,000 patients³ have shown that adjunctive therapy with LAMICTAL offers a wide range of activity in the management of epilepsy for patients who are not satisfactorily controlled by conventional therapies.¹⁻²⁴ In fact, LAMICTAL has been shown to render patients seizure-free^{4,6,25} or to reduce seizure frequency^{1,6,10,15-17,23,25} and severity in up to 65% of patients.^{1,6,16,23,25} LAMICTAL has demonstrated a more favourable CNS side-effect profile in healthy volunteers compared to phenytoin.²⁶ Incidence of somnolence was 13% for LAMICTAL compared to 12% for placebo in pooled results of four double-blind, placebo-controlled studies.⁷ Moreover, the majority of patients taking LAMICTAL will not experience unwanted CNS-related side effects.^{5†} More of your refractory patients will feel better on LAMICTAL.^{6,23}

LAMICTAL has activity across a wide range of seizure types. You can now offer your patients proven tolerability with a low CNS side-effect profile.[†] When faced with refractory patients, choose LAMICTAL – in 25-, 100- or 150-mg strengths – as your first add-on therapy.[†]

Lamotrigine
Lamictal[®]

Sooner or later, every migra again. Imitrex® believes



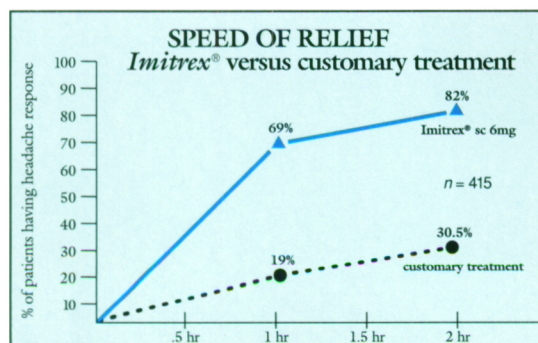
A patient who complains about migraine is also complaining about a disrupted life. Indeed, research shows that in at least 31% of attacks, migraine sufferers cannot continue with their daily activities.¹

That's where *Imitrex*® comes in. For most patients, *Imitrex*® can bring complete relief between 90 minutes and 2 hours, versus up to 9 hours for the usual treatments.^{2,3} *Imitrex*® treats all the symptoms of migraine.^{**3-5}

Unlike conventional remedies, it has not been shown to cause medication-induced headache.^{3,6-8} Its adverse events are generally well tolerated, quickly resolved and usually non-threatening when explained to the patient.^{***3,7,9} *Imitrex*® may be more expensive, but

over 250,000 Canadian patients continue to choose it for migraine relief.¹⁰

The successful use of *Imitrex*® is most likely in patients who understand its common



Adapted from *Cephalalgia*: Schoenen 1994.²

ine sufferer will feel normal it should be sooner.



side effects, and who know when the drug should be used.^{***11} *Imitrex*[®] should be taken at the start of a debilitating attack, and may also be used after the failure of conventional treatments (except ergotamine-containing preparations).³

Most patients have attacks that limit normal function.^{1,12} So give your patients[†] the option of using *Imitrex*[®]. It's a proven route to a fast recovery.²

For more information about *Imitrex*[®], please call 1-800-268-0324.



IMITREX[®]
S U M A T R I P T A N S U C C I N A T E

1994 Winner of the Prix Galien 

A faster way back.



*Customary treatments include simple analgesics, combination analgesics, ergot derivatives, NSAIDs, narcotics, antiemetics, others.² **Head pain, nausea, vomiting, photophobia and phonophobia.³ ***Fatigue, dizziness, nausea and vomiting have been reported. These side effects are usually mild to moderate in intensity, transient and resolve within 45 minutes of s.c. administration and within two hours of oral administration. *Imitrex*[®] has been associated with transient chest pain and tightness which may mimic angina pectoris. Only in very rare cases have the symptoms been associated with ischaemic ECG changes. If chest symptoms persist, patient should immediately consult physician.³ [†]Contraindicated in patients with ischaemic heart disease, angina pectoris including Prinzmetal angina, previous myocardial infarction and uncontrolled hypertension.³ *Imitrex*[®] is a selective 5-HT₁-like receptor agonist.³

When She Can't Remember Your Name,



Remember Ours.

Alzheimer Disease is a degenerative brain disorder that destroys vital brain cells. It affects over 1/4 million Canadians. And that's not including the people who love them.

Slowly, the disease steals away your ability to think, understand, remember, communicate, or to perform the simplest tasks, leaving you completely dependent.

There is no known cause, nor is there a cure.

But there is help and there is hope.

Alzheimer Canada is a national organization dedicated to

helping those affected by the disease, as well as their caregivers. We also conduct research into possible causes, treatments and a cure, so that we can put an end to this killer disease.

If someone you love has Alzheimer Disease, there is a place to turn.

Alzheimer
CANADA

Help for Today. Hope for Tomorrow.

Contact the Alzheimer organization in your area or Alzheimer Canada at
1320 Yonge Street, Suite 201, Toronto, Ontario M4T 1X2 Tel: (416) 925-3552

When phenytoin or carbamazepine
fail to provide adequate seizure control
in adult partial seizures...

Available as N.F.B.
in Ontario

ADD NEURONTIN

No pharmacokinetic drug interactions with standard
anticonvulsants have been observed with Neurontin.
Thus, it is easy to use as adjunctive therapy with
existing antiepileptic drugs.¹

NEURONTIN^{*}
(gabapentin capsules)

Easy to add-on

Neurontin is indicated as adjunctive therapy for the management of patients who are not satisfactorily controlled by conventional therapy. The most commonly observed adverse events not seen at an equivalent frequency in placebo-treated patients were somnolence, dizziness, ataxia, fatigue, nystagmus and tremor. Since Neurontin was administered most often in combination with other antiepileptic agents, it was not possible to determine which agent(s) was associated with adverse events.

PARKE-DAVIS

Scarborough, Ontario M1L 2N3
*T.M. Warner-Lambert Company, Parke-Davis Division,
Warner-Lambert Canada Inc., auth. user.

Reference: 1. *The Lancet* 1994;343:89-91.

PMAC PAAB
CCPP

For brief prescribing information
see pages xxv, xxvi.

What if one day next week you couldn't Walk?

Or maybe you couldn't speak clearly. Or your vision was blurred. That's what it's like to live with multiple sclerosis, an unpredictable disease of the central nervous system. Things you take for granted can become impossible and you don't know when or where or if it will strike again. But the research and services programs of the Multiple Sclerosis Society of Canada are providing some answers.

With your help, we can connect with a cure. **1-800-288-7582**

Multiple Sclerosis
Society of Canada

Introducing Pr **BETASERON**[®]

The first treatment for relapsing/remitting multiple sclerosis



Clinical trials have shown that:

- *The frequency of exacerbations was reduced by approximately 30%¹*
- *Moderate and severe exacerbations were reduced by 50%¹*
- *Disease activity, as measured by MRI, was reduced significantly²*
- *There was a low incidence of serious side effects¹*
- *Patient education about common side effects such as injection-site reactions and flu-like symptoms is key to compliance*

Over 40,000 patients treated to date³

 **BETASERON**[®]
INTERFERON BETA-1b
FOR SC INJECTION

Maintaining Independence

Lamictal
Traitement antiépileptique d'appoint

La maîtrise d'un vaste éven un profil discret d'effets



†Taux d'abandon ($\geq 0,6\%$) : étourdissements 2,4 %, céphalées 1,3 %, nausées 1,3 %, vision trouble 1,1 %, éruptions cutanées 1,1 %, diplopie 0,7 %, ataxie 0,6 %. En présence d'éruption cutanée inexpliquée, de fièvre, de symptômes pseudo-grippaux, ou de diminution de la maîtrise des crises, il faut surveiller les paramètres hépatiques, rénaux ou de coagulation. Voir dans la monographie du produit les recommandations chez les patients gériatriques et en cas d'atteinte rénale ou hépatique. De sérieux incidents cutanés peuvent être causés par un ajustement posologique initial rapide et l'emploi concomitant d'acide valproïque.

‡Comme avec la plupart des autres antiépileptiques, avant de prescrire LAMICTAL, vérifier dans la monographie du produit les risques d'interaction médicamenteuse avec d'autres antiépileptiques.

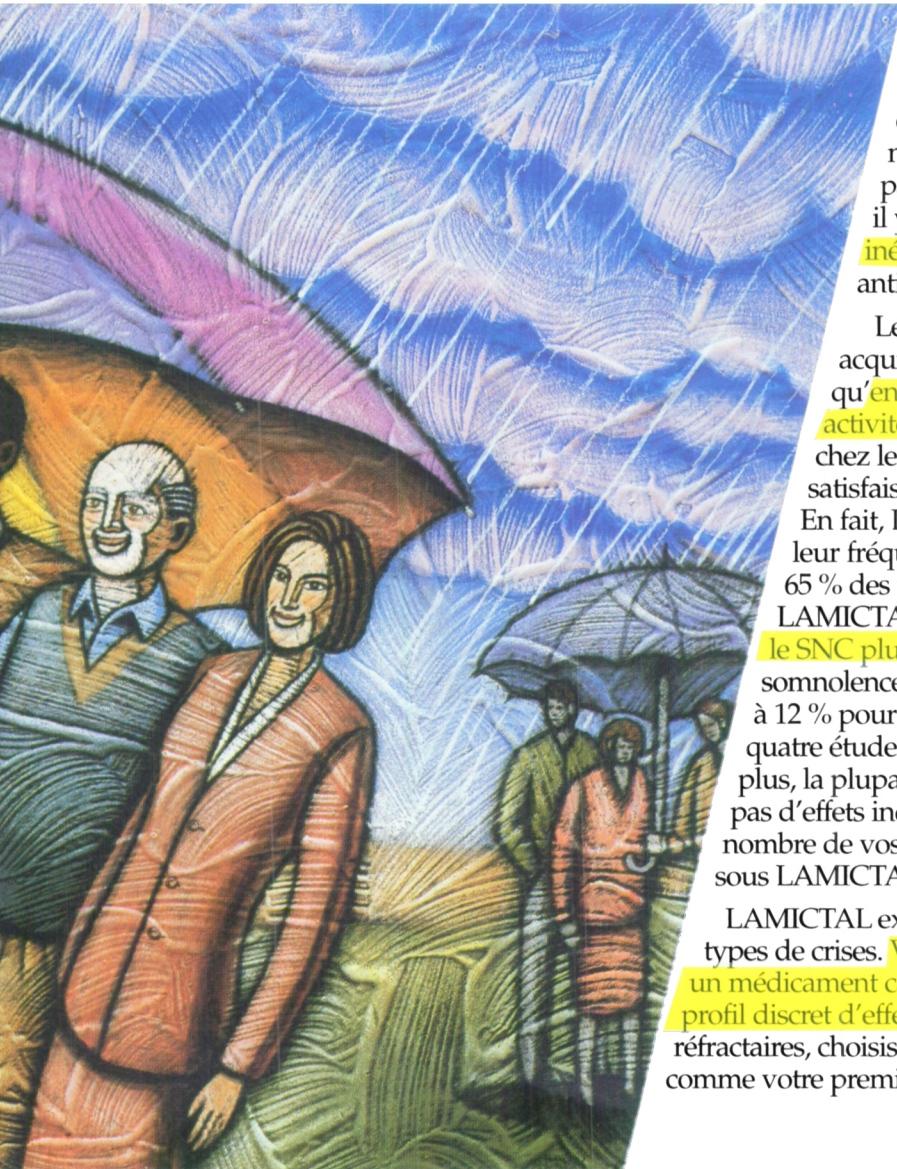
GlaxoWellcome

Glaxo Wellcome Inc.
Bureau d'affaires du Québec

©Marque déposée de The Wellcome Foundation Limited, Glaxo Wellcome Inc., usager inscrit.

FAAB
CCPP

tail de types de crises avec secondaires sur le SNC



De nombreux patients souffrant d'épilepsie – dans un vaste éventail de types de crises – ne sont pas contrôlés de façon satisfaisante par les traitements conventionnels¹. Maintenant, il y a **LAMICTAL, un nouvel antiépileptique inédit** sans parenté chimique avec aucun autre antiépileptique actuel^{1,2}.

Les essais cliniques et l'expérience mondiale acquise chez plus de 140 000 patients³ ont montré qu'**en traitement d'appoint, LAMICTAL offre une activité étendue dans le traitement de l'épilepsie** chez les patients qui ne sont pas contrôlés de façon satisfaisante avec les traitements conventionnels¹⁻²⁴. En fait, LAMICTAL a supprimé les crises^{4,6,25} ou diminué leur fréquence^{1,6,10,15-17,23,25} et leur gravité chez jusqu'à 65 % des patients^{1,6,16,23,25}. Chez des volontaires en santé, LAMICTAL a présenté **un profil d'effets secondaires sur le SNC plus favorable** que la phénytoïne²⁶. L'incidence de somnolence a été de 13 % pour LAMICTAL par rapport à 12 % pour le placebo dans les résultats combinés de quatre études à double insu contrôlées par placebo⁷. De plus, la plupart des patients sous LAMICTAL n'éprouveront pas d'effets indésirables qui affectent le SNC^{5†}. Un plus grand nombre de vos patients réfractaires se sentiront donc mieux sous LAMICTAL^{6,23}.

LAMICTAL exerce une activité dans un vaste éventail de types de crises. **Vous pouvez maintenant offrir à vos patients un médicament caractérisé par une tolérabilité éprouvée et un profil discret d'effets indésirables sur le SNC[†]**. Pour vos patients réfractaires, choisissez LAMICTAL – en 25, 100 ou 150 mg – comme votre premier traitement d'appoint[†].

lamotrigine
Lamictal[®]

INFORMATION FOR AUTHORS

The Canadian Journal of Neurological Sciences publishes original articles in neurology, neurosurgery and basic neurosciences. Manuscripts are considered for publication with the understanding that they, or the essence of their content, have not been published elsewhere except in abstract form and are not under simultaneous consideration by another journal. Articles undergo peer review. Manuscripts should be submitted to:

James A. Sharpe

Editor

Canadian Journal of Neurological Sciences

P.O. Box 4220, Station C

Calgary, AB Canada T2T 5N1

Manuscript Preparation

- Submit five high quality copies of the manuscript and original illustrations. Papers will be accepted in English or French. Manuscripts must be double spaced throughout including references, tables and legends for illustrations. Margins of at least 25mm should be left on all sides.
- After a paper has been reviewed, the author will be requested to submit four copies of the revised manuscript, including illustrations and a computer diskette (3 1/2" or 5 1/4" size) containing the article. Identify clearly first author's name, file name, word processing program and version, and system (i.e. DOS or Mac). Clearly indicate the order and importance of headings.
- For detailed instructions regarding style and layout refer to "*Uniform requirements for manuscripts submitted to biomedical journals*". Copies of this document may be obtained by writing to the Journal office, but the main points are summarized here. Articles should be submitted under conventional headings of *introduction, methods and materials, results, discussion*, but other headings will be considered if more suitable. Pages of text should be numbered consecutively.
- A **title page** should identify the title of the article which should be no more than 80 characters including spaces; name of institution(s) from which the work originated; and the name, address, telephone, and fax number of the corresponding author.
- **Abstract** Original Articles should be accompanied by an abstract of 250 words or less on a separate page, preferably in English and French, although the Journal will provide translation if required. Abstracts of original articles should consist of four paragraphs headed: *Background (or objective), Methods, Results and Conclusions*. Review articles should be accompanied by an abstract of 150 words or less.
- **Acknowledgements** including recognition of financial support should be typed on a separate page at the end of the text.
- The SI system (système international d'unités) should be used in reporting all laboratory data, even if originally reported in another system. Temperatures are reported in degrees celsius. English language text may use either British or American spelling, but should be consistent throughout.
- **References** should be numbered in the order of their citation in the text. Those cited only in tables and legends for illustrations are numbered according to the sequence established by the first iden-

tification in the text of a particular table or illustration. Titles of journals should be abbreviated according to the style used in Index Medicus. References should list the names of up to five authors; if there are more, cite the first three, then et al. Provide the full title, year of publication, volume number and inclusive pagination for journal articles. For any reference cited as "in press", five copies of the article must accompany the author's manuscript. Do not reference unpublished or "submitted" papers; these can be mentioned in the body of the text and authors must provide five copies of "submitted" manuscripts. Avoid "personal communications" and, if necessary, include them in the body of the text, not among the references. Reference citations should not include unpublished presentations or other non-accessible material. Books or chapter references should also include the place of publication and the name of the publisher. Examples of correct forms of reference follow:

Journals

Yang JF, Fung M, Edamura R, et al. H-Reflex modulation during walking in spastic paretic subjects. *Can J Neurol Sci* 1991; 18: 443-452.

Chapter in a book

McGeer PL, McGeer EG. Amino acid neurotransmitters. *In*: Siegel GJ, Albers RW, Agranoff BW, Katzman R, eds. *Basic Neurochemistry*. Boston: Little, Brown & Co., 1981: 233-254.

- **Illustrations** Submit five original sets of illustrations. We will not return illustrations; therefore, authors should keep negatives for all photographs. Submit high quality glossy black and white photographs preferable 127 x 173 mm (5" x 7"). Original artwork and radiographs should not be submitted. The additional cost of coloured illustrations must be borne by the author; quotations are available upon request from the Journal office. Identify each figure with a label at the back indicating top, figure number and first author. Letters and arrows applied to the figures to identify particular findings should be professional appliques suitable for publication. Photomicrographs should include a calibration bar with a scale indicated on the figure or in the legend. Legends for illustrations should be typed on a separate page from the illustrations.
- **Tables** Type tables double-spaced on pages separate from the text. Provide a table number and title for each. Particular care should be taken in the preparation of tables to ensure that the data are presented clearly and concisely. Each column should have a short or abbreviated heading. Place explanatory matter in footnotes, not in the heading. Do not submit tables as photographs.
- **Review articles** on selected topics are also published. They are usually invited, but unsolicited reviews will be considered. It is recommended that authors intending to submit review articles contact the Editor in advance.
- **Letters to the Editor** concerning matters arising in recent articles are welcome. Letters should be limited to two double-spaced pages and may include one illustration and a maximum of four references.
- **Permissions and Releases** Any non-original material (quotations, tables, figures) must be accompanied by written permission from the author and the copyright owner to reproduce the material in the Journal. Photographs of recognizable persons must be accompanied by a signed release from the legal guardian or patient authorizing publication.

Lorsque la phénytoïne ou la carbamazépine ne réussissent pas à procurer une maîtrise adéquate des crises partielles chez l'adulte.

Sur la liste de médicaments du Québec

AJOUTER NEURONTIN

Aucune interaction pharmacocinétique avec les anticonvulsants traditionnels n'a été observée avec Neurontin. Il est par conséquent facile de l'utiliser comme traitement adjuvant avec les antiépileptiques existants¹.

NEURONTIN^{*}
(capsules de gabapentine)

Facile à utiliser comme adjuvant

Neurontin est indiqué comme traitement d'appoint pour les patients dont l'état épileptique n'est pas bien maîtrisé par les traitements traditionnels. Les effets secondaires les plus courants qui n'ont pas été observés à une fréquence équivalente chez les patients sous placebo sont les suivants : somnolence, étourdissements, ataxie, fatigue, nystagmus et tremblements. Étant donné que Neurontin était administré le plus souvent en association avec d'autres antiépileptiques, il était impossible de déterminer à quel(s) agent(s) les effets secondaires étaient associés.

PARKE-DAVIS

Scarborough, Ontario M1L 2N3
^{*}M. de comm. Warner-Lambert Company, Parke-Davis
Division, Warner-Lambert Canada Inc., usager aut.

Référence : 1. *The Lancet* 1994;343:89-91.

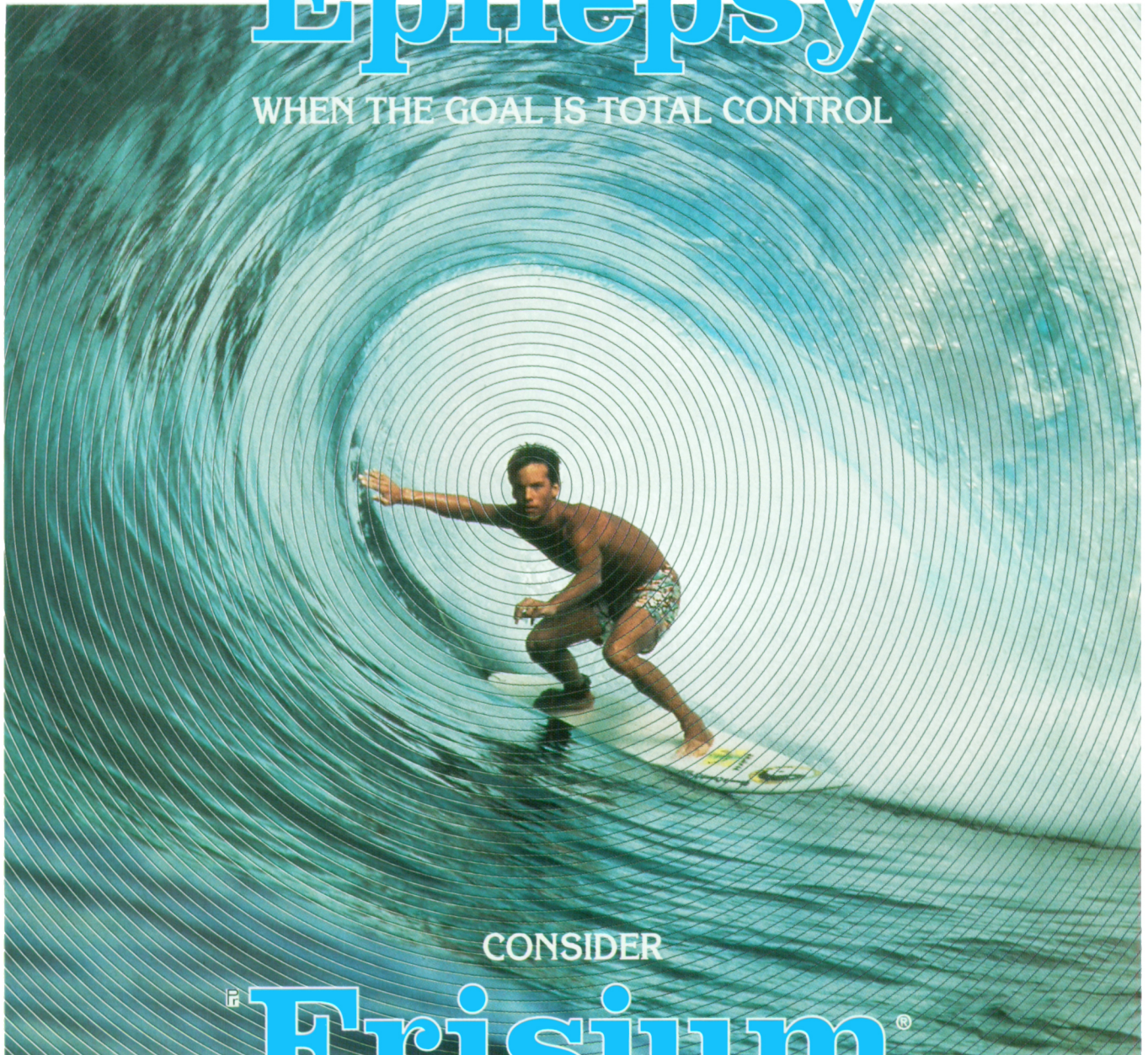
ACIM

PAAB
CCP

Pour documentation voir pages xxv, xxvi.

Epilepsy

WHEN THE GOAL IS TOTAL CONTROL



CONSIDER

Frisium®

(clobazam)

- Impressive degree of complete seizure control.¹
- Frisium is a “remarkably effective and [generally] safe add-on anti-epileptic drug”.¹
- Effective in *all* seizure types in pediatric *and* adult patients.²
- Once-daily dosage, preferably at bedtime.*

For a comprehensive approach to seizure control

*Daily dose can be divided for some patients.

Frisium is indicated as adjunctive therapy in epileptic patients not adequately stabilized with their current anticonvulsant therapy. As with all benzodiazepines, patients (particularly geriatrics) should be cautioned accordingly. Most frequent adverse effects (> 1%) include ataxia, weight gain, dizziness and nervousness.

PAAB AD-FRI-01/95

®Reg. Trademark of Hoechst AG, Germany
xvi

Hoechst-Roussel Canada Inc.
Montréal, Québec H4R 2E8

For brief prescribing information see page xxviii.