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**AWARD 2.** A grant-in-aid will be awarded to support a specific educational project which may include travel. (However, travel to regularly scheduled neurosurgical meetings is excluded.) The applicant must be a resident in training in a Canadian Neurosurgical Training Program, or if formal training is completed, within two years of having received certification in neurosurgery.

**APPLICATIONS FOR AWARD 1.** Papers should be received by the chairman of the Awards Committee not later than January 15. All papers received will be automatically forwarded to the program chairman for the annual meeting of the Canadian Congress of Neurological Sciences for further consideration. The successful candidate will be notified by April 1, and the awards will be presented at the annual meeting in June.

**APPLICATIONS FOR AWARD 2.** Applicants should forward a comprehensive letter to the chairman of the Awards Committee by January 15. The application should contain relevant personal information, a clear description of the educational project which is contemplated, and its purpose, and any supporting letters the applicant may wish to submit. The successful applicant will be notified by April 1.

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### ERRATUM

In the article entitled "The Computerized Tomographic Appearance of Angiographically Occult Arteriovenous Malformations of the Brain" by Richard Leblanc and Romeo Ethier which appeared in Volume 8, Number 1 (Feb), page 7, there was an omission in the Discussion section. The sentence on page 10, line 23 should read "Contrary to the angiographic appearance, the vascular nature of the lesions was suggested by the CT finding of vascular enhancement in 62% of the cases".

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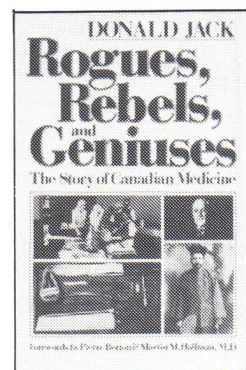


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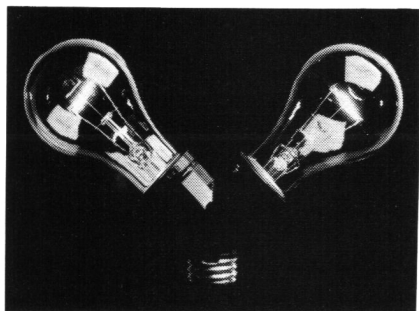
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Since vascular headache is a paroxysmal but basically chronic disorder, treatment must extend over an adequate period of time in order to obtain maximal benefit. While some patients have responded rather quickly, most investigators agree that a four-week trial period should be instituted to determine the true efficacy of pizotiline in specific cases. The periodic nature of the disorder will have to be considered in determining when and for how long therapy should be maintained. Since some investigators have observed a change in headache pattern after several months of therapy, a drug-free interval is advisable to reassess the necessity of continuing treatment. The dosage should be reduced gradually during the last two weeks of each treatment course to avoid a "headache rebound".

**Composition** - Each ivory, sugar-coated tablet contains 0.5 mg of pizotiline as the hydrogen malate. Each single scored white tablet contains 1 mg of pizotiline as the hydrogen malate.

**Contraindications** - Anticholinergic agents, including pizotiline, are contraindicated in patients taking monoamine oxidase inhibitors, and in patients with pyloroduodenal obstruction and stenosing pyloric ulcer. Pizotiline is also contraindicated for patients who have a known sensitivity to the drug. Until further studies are completed, the drug is not recommended for children under the age of twelve.

**Warnings and precautions** - Since drowsiness may occur with pizotiline, sensitive patients should be cautioned against activities requiring rapid and precise response (i.e. driving an automobile or operating dangerous machinery) until their response to the drug has been determined. Since the effects of antihistamines can potentiate those of other drugs affecting the central nervous system, patients should be cautioned against drinking alcoholic beverages or taking hypnotics, sedatives, psychotherapeutic agents or other drugs with CNS depressant effects during pizotiline therapy. Administer pizotiline with caution to patients with narrow angle glaucoma or with urinary retention (e.g. prostatic hypertrophy).

Since it is desirable to keep drug administration to a minimum during pregnancy, pizotiline should be given only when the benefits derived from treatment exceed the possible risks to mother and fetus. Some patients developed tolerance to pizotiline with prolonged use of the drug. An increase in dosage may overcome this tolerance.

After prolonged use, hepatotoxic effects might occur and patients should be advised to report for adequate laboratory evaluation. Patients with diabetes, cardiovascular disease and known or suspected impaired renal or hepatic function should be given pizotiline with caution, and appropriate laboratory tests should be done at regular intervals.

Lens opacities occurred in two cases but did not appear to be drug-related. However, it is recommended that any impairment in vision be reported to the attending physician for further investigation.

**Side effects** - Increased appetite, weight gain, and drowsiness are the most frequent side effects. An appropriate diet should be recommended by the physician for patients benefiting from the drug but gaining excessive weight. A gradual increase in the dosage of pizotiline is recommended to minimize or reduce the incidence of drowsiness. The following adverse effects have been observed less frequently in relation to the aforementioned reactions: fatigue, nausea, dizziness, headache, confusion, edema, hypotension, depression, weakness, epigastric distress, dry mouth, nervousness, impotence and muscle pain.

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### Warnings

Discontinue levodopa therapy at least 12 hours before initiating "Prolopa" therapy. Increase dosage of "Prolopa" 100-25 gradually to avoid inducing CNS side effects (abnormal movements). Observe patients for signs of depression with suicidal tendencies or other serious behavioural changes. Caution in patients with history of psychotic disorders or those receiving reserpine, phenothiazines or tricyclic antidepressants. Administer with care to patients with history of myocardial infarction or who have atrial, nodal or ventricular arrhythmias.

**Safety in patients under 18 years has not been established. In women who are or may become pregnant benefits should be weighed against possible hazards to mother and fetus. Should not be given to nursing mothers.**

### Precautions

Caution in patients with history of convulsive disorders. Upper gastrointestinal hemorrhage possible in patients with history of peptic ulcer.

Normal activity should be resumed gradually to avoid risk of injury.

Administer with caution to patients on antihypertensive medication; discontinue 12 hours before anesthesia. Monitor intraocular pressure in patients with chronic wide-angle glaucoma.

### Adverse reactions

Most common are abnormal involuntary movements, usually dose dependent, and may disappear or become tolerable after dosage reduction.

Most serious after prolonged therapy are periodic oscillations in performance (end of dose akinesia, on-off phenomenon and akinesia paradoxa).

Nausea, vomiting, arrhythmias and orthostatic hypotension occur less frequently than with levodopa alone.

Psychiatric disturbances, including mild elation, depression, anxiety, agitation, aggression, hallucinations and delusions have been encountered.

Consult monograph for complete list of reported adverse effects.

### Dosage

Recommended initial dose is one capsule "Prolopa" 100-25 once or twice daily, increased carefully by one capsule every third or fourth day until an optimum therapeutic effect is obtained without dyskinesias. At upper limits of dosage increments should be made slowly at 2 to 4-week intervals.

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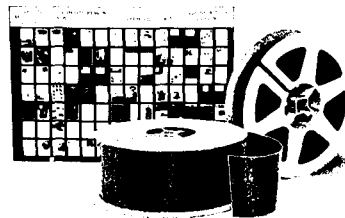
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Fiorinal should be used with caution in the presence of peptic ulcer.

During pregnancy and lactation, Fiorinal should be taken only upon medical advice.

### Adverse reactions

Drowsiness, dizziness, nausea, constipation and skin rash may occur in rare instances.

### Dosage

Adults, 2 tablets or capsules at once, followed if necessary, by 1 tablet or capsule every 3 to 4 hours, or as directed by the physician. Maximum daily dose: 6 tablets or capsules.

Children, 1 to 3 tablets or capsules a day, according to age.

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- Federal Register, Vol. 42, No. 220:  
59115. Tuesday, November 15, 1977.

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### CONTRAINDICATIONS

Dilantin is contraindicated in those patients with a history of hypersensitivity to hydantoin products.

### WARNINGS

**Abrupt withdrawal of phenytoin in epileptic patients may precipitate status epilepticus.** Phenytoin is not indicated in seizures due to hypoglycemia or other causes which may be immediately identified and corrected.

Phenytoin metabolism may be significantly altered by the concomitant use of other drugs such as:

**A** Barbiturates may enhance the rate of metabolism of phenytoin. This effect, however, is variable and unpredictable. It has been reported that in some patients the concomitant administration of carbamazepine resulted in an increased rate of phenytoin metabolism.

**B** Coumarin anticoagulants, disulfiram, phenylbutazone, and sulfaphenazole may inhibit the metabolism of phenytoin, resulting in increased serum levels of the drug. This may lead to an increased incidence of nystagmus, ataxia, or other toxic signs.

**C** Isoniazid inhibits the metabolism of phenytoin so that with combined therapy, patients who are slow acetylators may suffer from

phenytoin intoxication.

**D** Tricyclic antidepressants in high doses may precipitate seizures, and the dosage of phenytoin may have to be adjusted accordingly.

**Usage in Pregnancy:** The effects of Dilantin in human pregnancy and nursing infants are unknown.

The prescribing physician will have to determine the risk/benefit in treating or counselling epileptic women of childbearing potential.

### PRECAUTIONS

The liver is the chief site of biotransformation of phenytoin, patients with impaired liver function may show early signs of toxicity. Elderly patients or those who are gravely ill may show early signs of toxicity.

A small percentage of individuals who have been treated with phenytoin have been shown to metabolize the drug slowly. Slow metabolism may be due to limited enzyme availability and lack of induction; it appears to be genetically determined.

Phenytoin has been associated with reversible lymph node hyperplasia. If lymph node enlargement occurs in patients on phenytoin, every effort should be made to substitute another anticonvulsant drug or drug combination.

Drugs that control generalized tonic-clonic (grand mal) seizures are not effective for absence (petit mal) seizures. Therefore, if both conditions are present, combined drug therapy is needed.

Hyperglycemia, resulting from the drug's inhibitory effect on insulin release, has been reported. Phenytoin may also raise the blood sugar level in persons already suffering from hyperglycemia.

### ADVERSE REACTIONS

**Central Nervous System:** The most common manifestations encountered with phenytoin

therapy include nystagmus, ataxia, slurred speech, and mental confusion. Dizziness, insomnia, transient nervousness, motor twitchings, and headache have also been observed. These side effects may disappear with continuing therapy at a reduced dosage level.

**Gastrointestinal System:** Phenytoin may cause nausea, vomiting, and constipation. Administration of the drug with or immediately after meals may help prevent gastrointestinal discomfort.

**Integumentary System:** Dermatological manifestations sometimes accompanied by fever have included scarlatiniform or morbilliform rashes.

**Hemopoietic System:** Hemopoietic complications, some fatal, have occasionally been reported in association with administration of phenytoin. These have included thrombocytopenia, leukopenia, granulocytopenia, agranulocytosis, and pancytopenia.

**Other:** Gingival hyperplasia occurs frequently; this incidence may be reduced by good oral hygiene including gum massage, frequent brushing and appropriate dental care. Polyarthropathy and hirsutism occur occasionally. Hyperglycemia has been reported. Toxic hepatitis, liver damage, and periarthritis nodosa may occur and can be fatal.

### MANAGEMENT OF OVERDOSAGE

The mean lethal dose in adults is estimated to be 2 to 5 grams. The cardinal initial symptoms are hystagmus, ataxia and dysarthria. The patient then becomes comatose, the pupils are unresponsive and hypotension occurs. Death is due to respiratory depression and apnea. Treatment is non-specific since there is no known antidote. First, the stomach should be emptied. If the gag reflex is absent, the airway should be supported. Oxygen, vasopressors and assisted ventilation may be necessary for central nervous system, respiratory and

cardiovascular depression. Finally, hemodialysis can be considered since phenytoin is not completely bound to plasma proteins.

### DOSE AND ADMINISTRATION

Dosage should be individualized to provide maximum benefit. In some cases, serum blood level determinations may be necessary for optimal dosage adjustments—the clinically effective serum level is usually 10–20 mcg/mL.

**Adult Dose:** Patients who have received no previous treatment may be started on one 100 mg Dilantin Capsule three times daily, and the dose then adjusted to suit individual requirements.

**Pediatric Dose:** Initially, 5 mg/kg/day in two or three equally divided doses, with subsequent dosage individualized to a maximum of 300 mg daily. A recommended daily maintenance dosage is usually 4 to 8 mg/kg. Children over 6 years old may require the minimum adult dose (300 mg/day). Pediatric dosage forms available include a 30 mg Capsule, a 50 mg palatably flavoured Infatab, or an oral suspension form containing 30 mg of Dilantin in each 5 mL.

**Alternative Dose:** Once-a-day dosage for adults with 300 mg of Dilantin may be considered if seizure control is established with divided doses of three 100 mg Capsules daily.

### HOW SUPPLIED

Dilantin 100 mg Capsules; in bottles of 100 & 1000.

Complete prescribing information available upon request.

## PARKE-DAVIS

Parke-Davis Canada Inc., Scarborough, Ontario

\*Reg. T.M. Parke Davis & Company  
 Parke-Davis Canada Inc., auth. user





**Brief Prescribing Information**  
Tegretol® 200 mg carbamazepine

**Indications and Clinical Use**

**A. Trigeminal Neuralgia:** Tegretol is indicated for the symptomatic relief of pain of trigeminal neuralgia only during periods of exacerbation of true or primary trigeminal neuralgia (tic douloureux). It should not be used preventively during periods of remission. In some patients, Tegretol has relieved glossopharyngeal neuralgia. For patients who fail to respond to Tegretol, or who are sensitive to the drug, recourse to other accepted measures must be considered.

Tegretol is not a simple analgesic and should not be used to relieve trivial facial pains or headaches.

**B. Tegretol has been found useful:**

- 1) in the management of psychomotor (temporal lobe) epilepsy and,
- 2) as an adjunct, in some patients with secondary or partial epilepsy with complex symptomatology or secondarily generalized seizures, when administered in combination with other antiepileptic medication.
- 3) as an alternative medication in patients with generalized tonic-clonic seizures who are experiencing marked side effects or fail to respond to other anticonvulsant drugs.

Tegretol is essentially ineffective in controlling petit mal, minor motor, myoclonic and predominantly unilateral seizures, and does not prevent the generalization of epileptic discharge.

**Contraindications**

Tegretol should not be administered to patients with a history of hepatic disease or serious blood disorder. Tegretol should not be administered immediately before, in conjunction with, or immediately after a monoamine oxidase inhibitor. When it seems desirable to administer Tegretol to a patient who has been receiving a MAO inhibitor, there should be as long a drug-free interval as the clinical condition allows, but in no case should this be less than 14 days. Then the dosage of Tegretol should be low initially, and increased very gradually.

Tegretol should not be administered to patients presenting atrioventricular heart block.

Safe use in pregnancy has not been established. Therefore, Tegretol should not be administered during the first three months of pregnancy. Tegretol should not be given to women of childbearing potential unless, in the opinion of the physician, the expected benefits to the patient outweigh the possible risk to the foetus (See Reproductive Studies). Because of demonstrated toxicity in nursing animals, Tegretol should not be administered to nursing mothers.

Because of the similarity of chemical structure, Tegretol should not be administered to patients with known hypersensitivity to any of the tricyclic compounds, such as amitriptyline, trimipramine, imipramine, or their analogues or metabolites.

**Warnings**

Although reported infrequently, serious adverse effects have been observed during the use of Tegretol. Agranulocytosis and aplastic anemia have occurred in a few instances with a fatal outcome. Leucopenia, thrombocytopenia and hepatocellular and cholestatic jaundice have also been reported. It is, therefore, important that Tegretol should be used carefully and close clinical and frequent laboratory supervision should be maintained throughout treatment in order to detect as early as possible signs and symptoms of a possible blood dyscrasia.

Long-term toxicity studies in rats indicated a potential carcinogenic risk. Therefore, the possible risk of drug use must be weighed against the potential benefits before prescribing carbamazepine to individual patients.

**Precautions**

**Monitoring of Haematological and Other Adverse Reactions:** Complete blood studies, including platelet counts, and evaluation of hepatic and renal function and urinalysis should be carried out before treatment is instituted. Careful clinical and laboratory supervision should be maintained throughout treatment, including frequent performance of complete blood counts, in order to detect any early signs or symptoms of blood dyscrasia. Should any signs or symptoms or abnormal laboratory findings suggestive of blood dyscrasia or liver disorder occur, Tegretol should be immediately discontinued until the case is carefully reassessed.

**Urinary Retention and Increased Intraocular Pressure:** Because of its anticholinergic action, Tegretol should be given cautiously, if at all, to patients with increased intraocular pressure or urinary retention. Such patients should be followed closely while taking the drug.

**Occurrence of Behavioural Disorders:** Because it is closely related to the other tricyclic drugs, there is some possibility that Tegretol might activate a latent psychosis, or, in elderly patients, produce agitation or confusion, especially when combined with other drugs. Caution should also be exercised in alcoholics.

**Use in Patients with Cardiovascular Disorders:** Tegretol should be used cautiously in patients with a history of coronary artery disease, organic heart disease, or congestive failure. If a defective conductive system is suspected, an E.K.G. should be performed before administering Tegretol, in order to exclude patients with atrioventricular block.

**Use in Patients taking Oral Contraceptives:** In women under treatment with Tegretol, the reliability of oral contraceptives may be adversely affected; such patients should accordingly be advised to use some alternative, non-hormonal method of contraception.

**Driving and operating Hazardous Machinery:** Because dizziness and drowsiness are possible side effects of Tegretol, patients should be warned about the possible hazards of operating machinery or driving automobiles.

**Adverse Reactions**

The reactions which have been most frequently reported with Tegretol are drowsiness, unsteadiness on the feet, vertigo, dizziness, gastrointestinal disturbances, and nausea. These reactions usually occur only

during the initial phase of therapy. They have rarely necessitated discontinuing Tegretol therapy, and can be minimized by initiating treatment at a low dosage. The more serious adverse reactions observed are the haematologic, hepatic, cardiovascular and dermatologic reactions, which require discontinuation of therapy.

The following adverse reactions have been reported:  
**Haematological reactions:** Transitory leucopenia, eosinophilia, leucocytosis, thrombocytopenic purpura, agranulocytosis, macrocytic anemia and aplastic anemia. In a few instances, deaths have occurred.

**Hepatic disturbances:** During the long-term administration of Tegretol, abnormalities in liver function tests and cholestatic or hepatocellular jaundice have been observed.

**Dermatological reactions:** The following reactions occurred during treatment with Tegretol: skin sensitivity reactions and rashes, erythematous rashes, pruritic eruptions, urticaria, photosensitivity, pigmentary changes, neurodermatitis and in rare cases Stevens-Johnson syndrome, exfoliative dermatitis, alopecia, diaphoresis, erythema multiforme, erythema nodosum, and aggravation of disseminated lupus erythematosus.

**Neurological reactions:** The reactions reported as occurring during treatment with Tegretol include vertigo, somnolence, disturbances of coordination, confusion, headache, fatigue, blurred vision, transient diplopia and oculomotor disturbances, speech disturbances, abnormal involuntary movements and increase in motor seizures. In addition, peripheral neuritis and paresthesia, depression with agitation, talkativeness, nystagmus, and tinnitus have been reported but only very rarely. There have been some reports of paralysis and other symptoms of cerebral arterial insufficiency but no conclusive relationship to the administration of Tegretol could be established.

**Cardiovascular systems:** Recurrence of thrombophlebitis in patients with a prior history of thrombophlebitis, congestive heart failure, aggravation of hypertension, Stokes-Adams in patients with AV block, hypotension, syncope and collapse, edema, aggravation of coronary artery disease. Some of these complications (including myocardial infarction and arrhythmia) have been associated with other tricyclic compounds.

**Genitourinary reactions:** Urinary frequency, acute urinary retention, oliguria with elevated blood pressure, and impotence. Elevation of BUN, albuminuria and glycosuria also have been observed.

**Digestive tract:** Disturbances associated with Tegretol therapy have included nausea, vomiting, gastric or abdominal discomfort, diarrhoea, anorexia and dryness of the mouth and throat, glossitis and stomatitis.

**Eyes:** There is no conclusive evidence that Tegretol produces pathological changes in the cornea, lens or retina. However, it should be recognized that many phenothiazines and related drugs have been shown to cause eye changes. By analogy, periodic eye examinations, including slitlamp funduscopy and tonometry, are recommended.

Other reactions reported during treatment with Tegretol include fever and chills, lymphadenopathy, aching joints and muscles, leg cramps and conjunctivitis.

**Dosage and Administration**

**Use in Epilepsy (see Indications):** A low initial daily dosage with a gradual increase in dosage is advised. Dosage should be adjusted to the needs of the individual patient.

**Adults and Children over 12 years of age:** Initially, 100 to 200 mg once or twice a day depending on the severity of the case and previous therapeutic history. The initial dosage is progressively increased, until the best response is obtained, up to 600 mg daily. The usual optimal dosage is 600 mg daily, but occasionally dosages up to 800 to 1000 mg have been used for short periods. As soon as disappearance of seizures has been obtained and maintained, dosage should be reduced very gradually until a minimum effective dose is reached.

**Use in trigeminal neuralgia:** The initial daily dosage should be small; 200 mg, taken in two doses of 100 mg each is recommended. The total daily dosage can be increased by 200 mg per day until relief of pain is obtained. This is usually achieved at a dosage between 200 and 800 mg daily, but occasionally up to 1200 mg per day may be necessary. As soon as relief of pain has been obtained and maintained, progressive reduction in dosage should be attempted until a minimum effective dosage is reached. Because trigeminal neuralgia is characterized by periods of remission, attempts should be made to reduce or discontinue the use of Tegretol at intervals of not more than 3 months, depending upon the individual clinical course.

Prophylactic use of the drug in trigeminal neuralgia is not recommended. Tegretol should be taken in two or three divided doses daily, with meals whenever possible.

**Dosage Forms**

Tegretol is available as a 200 mg white, round, flat, bevelled-edged, double-scored tablet, imprinted with the GEIGY monogram.

**Availability**

Bottles of 50 and 500 tablets. Protect from heat and humidity.

Full information available on request.

See outside back cover.



**Geigy**  
Dorval, Qué. H9S 1B1

**Rx Summary**

**Indications**

Alone or adjunctively in the management of myoclonic, akinetic and petit mal variant seizures. In petit mal (absence spells) when response to succinimides unsatisfactory.

**Contraindications**

Hypersensitivity to benzodiazepines. Clinical or biochemical evidence of significant liver disease. Narrow angle glaucoma.

**Warnings**

Use in pregnancy: in women who are or who may become pregnant when potential benefits warrant possible risks to mother and fetus. Mothers receiving 'Rivotril' should not breastfeed infants. Consider the risk/benefit of long-term use, particularly in children.

**Precautions**

Use of multiple anticonvulsants may increase CNS depression and dosage of each may need adjustment downward. Avoid abrupt withdrawal and consider substitution with another anticonvulsant during withdrawal.

May cause paradoxical increase in seizure activity or new seizure types. Concomitant use with valproic acid may produce absence status.

Caution patients against engaging in hazardous activities requiring complete mental alertness or physical coordination. Warn against concomitant use of alcohol or other CNS depressant drugs. Monitor patients who may be prone to increasing the dosage on their own accord.

Administer with caution to patients with impaired renal function. Periodic liver function tests and blood counts may be advisable during long-term therapy.

Institute therapy with caution in patients with chronic respiratory disease because of possible hypersecretion in upper respiratory tract.

**Adverse Reactions**

Drowsiness has occurred in 50% and ataxia in 30% of patients but these effects have diminished with time. Behavioural problems have been noted in approximately 25% and increased salivation in 7% of patients.

Consult monograph for complete list of reported adverse reactions.

**Dosage**

Depends upon age and must be determined according to clinical response and tolerance. Daily requirements should be given in 2 or 3 divided doses and if not equal, the larger dose should be given before retiring.

Children up to 10 years (30 kg): Initial dose should be 0.01 to 0.03 mg/kg/day and should not exceed 0.05 mg/kg/day. Increase dose by 0.25 to 0.5 mg every third day to maintenance dose of 0.1 to 0.2 mg/kg/day providing optimum response.

Adults: Initial dose should not exceed 1.5 mg/day. Increase dose by 0.5 to 1.0 mg every third day to maintenance dose of 8 to 10 mg/day with optimum response. Dosage in excess of 20 mg/day should be administered with caution.

Bear in mind possible increased depressant effects whenever 'Rivotril' is added to an existing anticonvulsant regimen.

**Supply**

Orange, cylindrical, biplane tablets with RIVOTRIL 0.5 engraved on one face, and single scored on the other with ROCHE above and C below the score, each containing 0.5 mg clonazepam. White, cylindrical, biplane tablets with RIVOTRIL 2 engraved on one face, and single scored on the other with ROCHE above and C below the score, each containing 2 mg clonazepam. Bottles of 100.

**References**

1. Shakir, R.A. et al: *Arch. Neurol.* 36:302, May 1979.
2. Bruni, J.: *CMAJ* 120:819, April 7, 1979.
3. Browne, T.R.: *New Eng. J. Med.* (Ed.), 299:812-816, Oct. 1978.

Product Monograph available on request.  
® Reg. Trade Mark

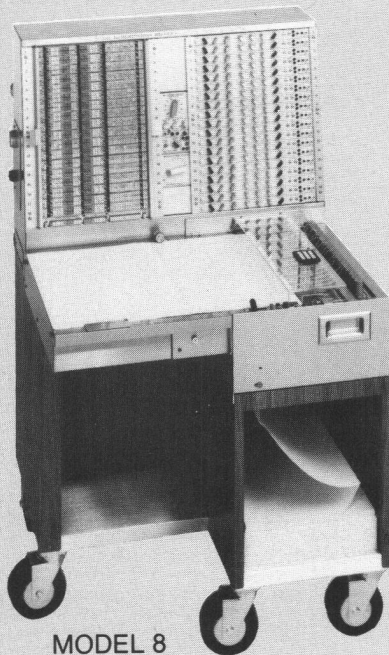
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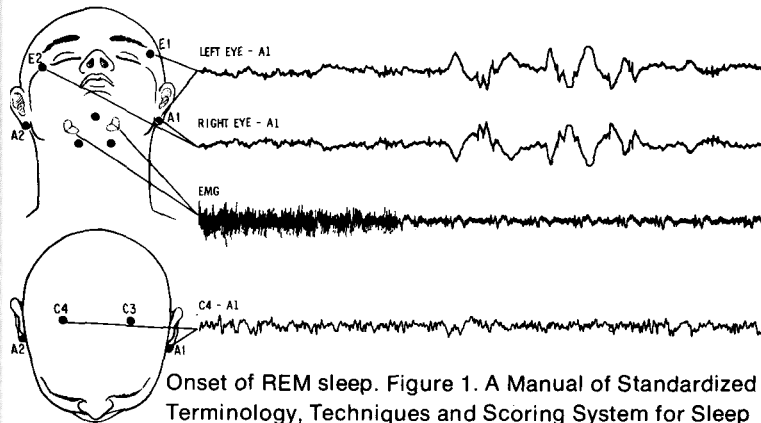
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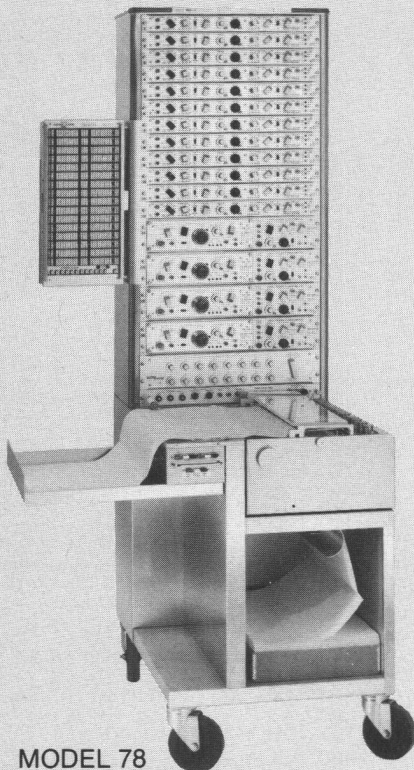
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MODEL 8



Onset of REM sleep. Figure 1. A Manual of Standardized Terminology, Techniques and Scoring System for Sleep Stages of Human Subjects. UCLA-BIS-DHEW.



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For multiple parameter recording of sleep-wake disorders in the clinical or the research setting, Grass Polygraphs and EEGs have the reliability and flexibility required.

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# These minors are victims



Jean — myoclonic seizures



Michael — akinetic seizures



Carol — Lennox-Gastaut syndrome

These children, victims of minor motor seizures, may benefit from the many advantages offered by 'Rivotril'.

- Effective in reducing the frequency and/or severity of a variety of epileptic seizures
  - akinetic seizures
  - myoclonic seizures
  - Lennox-Gastaut syndrome (petit mal variant)
  - absence seizures (where succinimide therapy has failed)
- flexible dosage regimen encourages patient compliance
- no reports of incompatibility with a ketogenic diet
- economical, for long-term therapy
- may be used concomitantly with most other anticonvulsants

'Rivotril' has not been associated with the severe side effects seen with some other anticonvulsant medications.

- No reports of serious side effects, such as hepatotoxicity.
- Very low incidence of nausea and G.I. upsets.<sup>1</sup>
- No serious problems of drug interaction. (eg. ASA)
- Proven safety record in long-term administration.
- Drowsiness, which may occur, is generally dose-related and may be well controlled with proper dosage adjustment.<sup>2,3</sup>

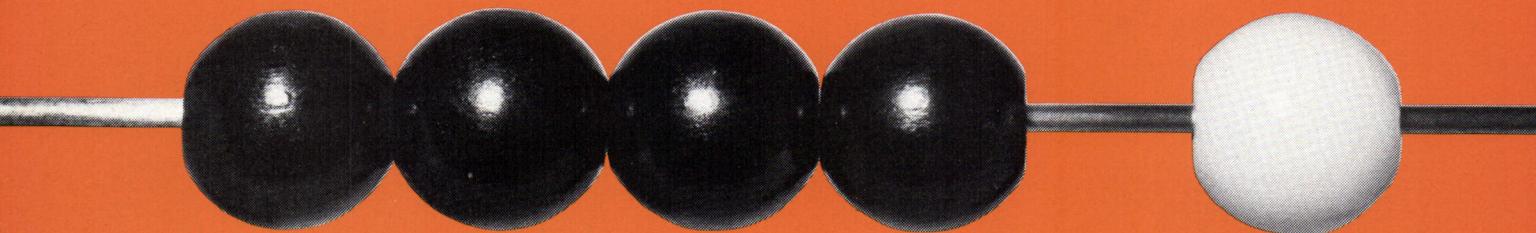


For Rx Summary, see page (xix)

## Rivotril<sup>®</sup> for the victims of minor motor seizures

**New dosage flexibility  
Prolopa 50-12.5 capsules**

**the  
4:1  
ratio**



**preferred by Parkinson patients**

In Parkinson Therapy:




# Prolopa®

4 parts L-dopa: 1 part benserazide

---

For the response you expect...  
without the frequency  
of peripheral side effects

The 4:1 ratio provides

-  Excellent clinical response in the management of Parkinsonian disability.<sup>1,2</sup>
-  Significantly fewer side effects – nausea and vomiting – than a 10:1 ratio Levodopa/Carbidopa preparation during the first six months of treatment.<sup>1,2</sup>
-  Patient preference over the 10:1 ratio Levodopa/Carbidopa preparation, with respect to nausea and vomiting.<sup>1</sup>

References:

1) Rinne UK, Mölsä P. Neurology, 1979; 29:1584-1589.

2) Pakkenberg H et al, Acta Neurol. Scand 1976; 53:376-385.

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# Prolopa®

right from the start



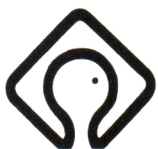
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See page xvii for brief prescribing information.

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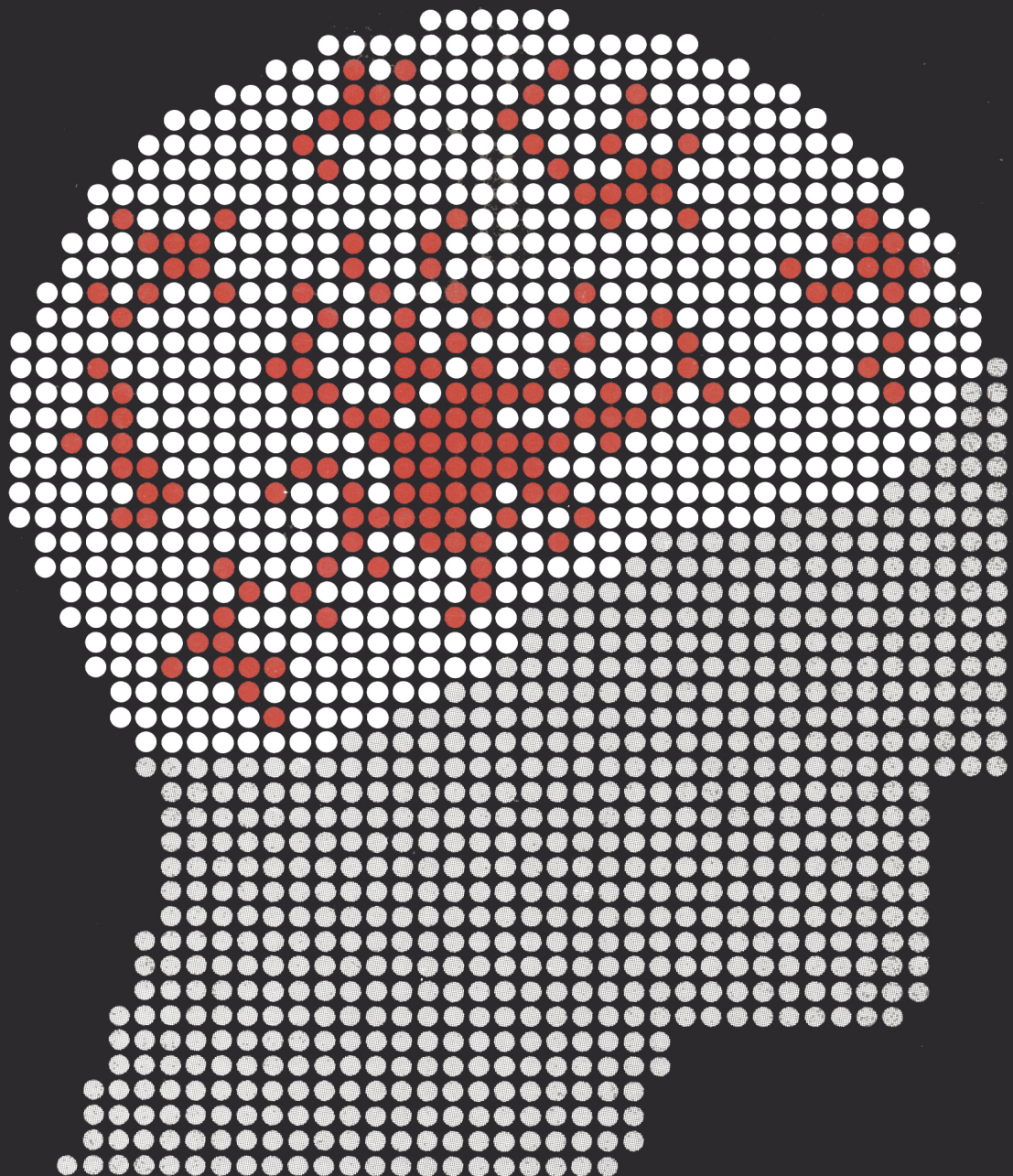
**The parkinson  
foundation  
of canada**

Information and companionship for Parkinson patients is available from the Parkinson Foundation of Canada.  
Please write or call: Suite 232, ManuLife Centre, 55 Bloor St. West, Toronto, Ontario M4W 1A6. Telephone: (416) 964-1155.

# Tegretol<sup>®</sup>

carbamazepine

To help control  
refractory generalized  
tonic-clonic seizures  
without excessive sedation



**legretol**  
carbamazepine

**To help control  
refractory generalized  
tonic-clonic seizures  
without excessive sedation**

