

A. INGREDIENT NAME:

CYCLANDELATE

B. Chemical Name:

Alpha-Hydroxy-, 3,3,5-Trimethylcyclohexyl Ester (9CI), BS 572, Capilan, Ciclospasmol, Alpha-Hydroxybenzeneacetic Acid 3,3,5-Trimethylcyclohexyl Ester., Sancyclan, Sepyron, 3, 3, 5-Trimethylcyclohexanol, Alpha-Phenyl-Alpha-Hydroxyacetate, 3,5,5-Trimethylcyclohexyl Amygdalate, 3,3,5-Trimethylcyclohexyl Mandelate, Methylcyclohexyl Mandelate.

C. Common Name:

Arto-Espasmol, Perebral, Saiclate
Cyclobral, Spasmione, Spasmocyclon, Spasmocyclone
Cyclospasmol
Benzenenacetic Acid, Clandilon, Cyclandelate, Cyclolyt, Cyclomandel, Cyclospasmol,

D. Chemical grade or description of the strength, quality, and purity of the ingredient:

Assay 99.8%

E. Information about how the ingredient is supplied:

A white to off-white amorphous powder with a slight menthol-like odor and a bitter taste.

F. Information about recognition of the substance in foreign pharmacopeias:

G. Bibliography of available safety and efficacy data including peer reviewed medical literature:

Cook, P. and James, I. Cerebrovascular Disease. *New Engl. J. Med.* 1981;305:1508 and 1560.

1998-345431-02-20-BD007

Young, J. Studies on the role of Cyclandelate in Cerebrovascular disease. *Br. J. Psychiat*, 1974; 124:177.

Hall, P. *J. Am. Geriat. Soc.* 1976; 24:41.

Davies, G. *Age and Ageing*. 1977; 6:156.

Rao, D. B. *J. Am. Geriat. Soc.* 1977; 25:548.

Brasseur, R. *Angiology*. 1978; 29: 121.

Capote, B. and Parikh. *J. Am. Geriat. Soc.*, 1978; 26:360.

Harding, F. A. *Angiology*, 1978;29:139.

Cunha-Vaz, J. G. Diabetic Retinopathy. *Br. J. Ophthalm.* 1977; 61:399.

Coffman, J. D. Peripheral vascular disease. *New Engl. J. Med.* 1979;300:713.

Hester, T. O., Theilman, G., and Green, W. Cyclandelate in the management of tinnitus: a randomized, placebo-controlled study. *Otolaryngol Head Neck Surg*, 1998; 118(3Pt1): 329-332.

Sauer, S., Schellenberg, R., and Hofmann, H. C. Functional imaging - first steps in an objective quantitative classification of migraine. *Eur J Med Res*, 1997; 29(9): 368-376.

Aparasu, R. R. and Fliginger, S. E. Inappropriate medication prescribing for the elderly by office-based physicians. *Ann Pharmacother*, 1997; 31(7-8):823-829.

Schellenberg, R., Todorova, A., and Wedekind, W. Pathophysiology and psychopharmacology of dementia—a new study design. 2. Cyclandelate treatment—a placebo-controlled double-blind clinical trial. *Neuropsychobiology*, 1997; 35(3):132-142.

Diener, H. C. Migraine—diagnosis, differential diagnosis and therapy. *Ther Umsch*, 1997;54(2):64-70.

Diener, H. C., Foh, M., and Iaccarino, C. Cyclandelate in the prophylaxis of migraine: a randomized, parallel, double-blind study in comparison with placebo and propranolol. The Study Group. In summary, cyclandelate has a comparable efficacy to that of propranolol. Both drugs were better than placebo. Both active treatments were well tolerated. *Cephalalgia*, 1996; 16(6):441-447.

Gerber, W. D., Schellenberg, R., and Thom, M. Cyclandelate versus propranolol in the prophylaxis of migraine—a double-blind placebo-controlled study. *Funct Neurol*, 1995; 10(1):27-35.

Mota, M. C., Leite, E., and Ruan, M.A. Effect of cyclospasmol on early diabetic retinopathy. *Int Ophthalmol*, 1987; 10(1):3-9.

H. Information about dosage forms used:

Capsules
Tablets
Suspension

I. Information about strength:

1.6g daily
400 mg Tablets and Capsules
400 mg/5ml Suspension

J. Information about route of administration:

Oral or Intravenous

K. Stability data:

Melts at about 50-53°
Cyclandelate can decompose by hydrolysis to mandelic acid.
Cyclandelate capsules concluded that less than 5% of the cyclandelate degraded in 66 months at ambient temperatures.

L. Formulations:

M. Miscellaneous Information:

Record 1 of 2 - IPA 1970-3/98

TI: Drug therapy reviews: vasodilating drugs and their use in cerebral symptomatology

AU: Caplan-LR

SO: Am-J-Hosp-Pharm (American-Journal-of-Hospital-Pharmacy); 1977; 34(Oct); 1075-1079

PY: 1977

AB: The effectiveness of vasodilator drugs in treating patients with cerebral vascular disease and grey area symptoms (confusion, lack of self care, dizziness, mood depression and unsociability) is reviewed. Agents discussed include cyclandelate, isoxsuprine HCl, Hydergine (dihydroergocornine, combination, dihydroergocristine, dihydroergocryptine), papaverine and nicotinic acid. Cerebral blood flow, vasodilating agents and cerebral blood flow, vasodilating agents in stroke or transient ischemic attacks, and vasodilating agents in senile or psychiatric patients are discussed. It is concluded that there are insufficient data concerning the effectiveness of these drugs in stroke patients. There is little to recommend their use for nonspecific symptoms of the elderly.

AN: 14-6194

Record 2 of 2 - IPA 1970-3/98

TI: Peripheral vasodilators for oral administration: NAS-NRC Drug Efficacy Study

AU: Anon

SO: Fed-Regist (Federal-Register); 1971; 36(Jul 20); 13347

PY: 1971

AB: The Food and Drug Administration has evaluated reports received from the National Academy of Sciences--National Research Council, Drug Efficacy Study Group, on Arlidin (nylidrin hydrochloride) tablets, Paveril (dioxylone) phosphate powder and tablets, and Cyclospasmol (cyclandelate) capsules and tablets. The FDA has considered the Academy's reports, as well as other available evidence, and concludes that the above-listed drugs are possibly effective for their labeled indications other than those described below. Nylidrin hydrochloride (oral) lacks substantial evidence of effectiveness for the indications: cerebrovascular disorders such as arteriosclerosis, other ischemic disturbances of the brain and eye, and livedo reticularis. Dioxylone phosphate (oral) lacks substantial evidence of effectiveness for its labeled indication: the relaxation of reflex spasm of blood vessels in coronary thrombosis. Cyclandelate (oral) lacks substantial evidence of effectiveness for the treatment of cerebral thrombosis; vasospastic or occlusive cerebral vascular disease; relief from head noises, ringing in the ears, chronic headache, feeling of weakness, unsteady gait, mental confusion, temporary fluctuations in hearing acuity, poor memory, and sl

National Library of Medicine: IGM Full Record Screen



Order Documents	Other Years	Log off IGM
Next Record	Details of Search	Return to Results
	Return to Search Screen	Previous Record



TITLE: Effect of cyclospasmol on early diabetic retinopathy.
AUTHOR: Mota MC; Leite E; Ruas MA; Verjans HL; Blakemore CB; Cunha-Vaz JG
SOURCE: Int Ophthalmol 1987 Feb;10(1):3-9
NLM CIT. ID: 87164769

ABSTRACT: A randomized, double-blind, placebo controlled study to investigate the long-term effect of Cyclospasmol (cyclandelate) on the abnormal permeability of the blood-retinal barrier was performed in 26 patients with insulin-dependent diabetes mellitus for at least 1 year and minimal retinopathy. Cyclospasmol 400 mg or placebo capsules were taken 4 times daily for 12 months by equal numbers in both groups. Each patient underwent a routine ophthalmoscopic examination, retinal fluorescein angiography and quantitative vitreous fluorophotometry to assess the permeability of the blood-retinal barrier just before the trial and following 6 and 12 months of therapy. Laboratory tests for determining blood and urine glucose levels and blood HbA1-levels were also carried out at these assessments. Statistically significant changes in diabetic control, in HbA1-levels or in the frequency of retinal microaneurysms could not be shown in either treatment group during the trial, nor were there any significant differences in these parameters between the two groups. Analysis of fluorophotometric data on fluorescein penetration into the left posterior vitreous demonstrated significant reductions in this parameter during the trial compared to the pretreatment level in Cyclospasmol treated diabetics. These changes in the pretreatment level after 6 and 12 months also differed significantly between the two groups. However, this statistically significant beneficial reduction in fluorescein penetration into the left posterior vitreous did not occur in the right eye in the Cyclospasmol group. In placebo treated patients a consistently deleterious trend for this parameter was observed for both eyes during the one year study.(ABSTRACT TRUNCATED AT 250 WORDS)

MAIN MESH SUBJECTS: Blood-Retinal Barrier/*DRUG EFFECTS
 Cyclandelate/*THERAPEUTIC USE
 Diabetic Retinopathy/*DRUG THERAPY
 Mandelic Acids/*THERAPEUTIC USE

ADDITIONAL MESH SUBJECTS: Adolescence
Adult
Clinical Trials
Double-Blind Method
Female
Human
Male
Middle Age
Random Allocation
Time Factors

PUBLICATION TYPES: CLINICAL TRIAL
JOURNAL ARTICLE
RANDOMIZED CONTROLLED TRIAL

LANGUAGE: Eng

REGISTRY NUMBERS: 0 (Mandelic Acids)
456-59-7 (Cyclandelate)

National Library of Medicine: IGM Full Record Screen



Order Documents	32,71 Other Years	Log off IGM
Next Record	Details Of Search	Return to Results
Return to Search Screen	Previous Record	



TITLE: Clinical efficacy and central mechanisms of cyclandelate in migraine: a double-blind placebo-controlled study.

AUTHOR: Siniatchkin M; Gerber WD; Vein A

AUTHOR AFFILIATION: I.M. Sechenov Moscow Medical Academy, Russian Autonomic Pathology Centre, Russian Headache Centre.

SOURCE: Funct Neurol 1998 Jan-Mar;13(1):47-56

NLM CIT. ID: 98244265

ABSTRACT: The mechanisms of action of calcium antagonists in the prophylactic treatment of migraine remain unclear. The most likely proposed mechanism seems to be via influence on the central nervous system, but the central effects of calcium entry blockers are insufficiently characterized. The aim of the present study was to investigate the central mechanisms behind the efficacy of cyclandelate in a double-blind placebo-controlled parallel-designed study using the contingent negative variation (CNV), an event-related slow potential for measuring cortical excitability and investigating preparation processes. The CNV recordings were performed in 25 females suffering from migraine without aura before treatment (baseline), after single dose administration of cyclandelate or placebo and after 8 weeks' treatment with cyclandelate (cyclandelate group, no.=15) or placebo (placebo group, no.=10). Cyclandelate reduced significantly the days with migraine and duration of migraine compared to placebo. In the cyclandelate group a significant reduction of all CNV components was observed and the changes in amplitudes compared to baseline were more pronounced after treatment. Placebo reduced the late CNV component only after single dose administration. There were no changes in the early and total CNV. Cyclandelate did not normalize the habituation of the slow negative potential. The results are discussed in terms of the influence of cyclandelate on cortical excitability and of the prevention of cortical spreading depression via antagonistic effect on calcium channels.

MAIN MESH SUBJECTS: Cyclandelate/ADVERSE EFFECTS/*THERAPEUTIC USE
Migraine/*DRUG THERAPY/PHYSIOPATHOLOGY
Vasodilator Agents/ADVERSE EFFECTS/*THERAPEUTIC USE

ADDITIONAL MESH SUBJECTS: Adult
Cerebral Cortex/PHYSIOPATHOLOGY
Double-Blind Method
Female
Human
Male

PUBLICATION TYPES: CLINICAL TRIAL
JOURNAL ARTICLE

RANDOMIZED CONTROLLED TRIAL

LANGUAGE: Eng
REGISTRY 0 (Vasodilator Agents)
NUMBERS: 456-59-7 (Cyclandelate)



Next Record	Details of Search	Print Results	Return to Search Screen	Print Results
Open Documents	92/71	Close	Log Off IGM	

National Library of Medicine: IGM Full Record Screen



Order Documents	32 67 Other Years	Log off IGM
Next Record	Details Of Search	Return to Results
	Return to Search Screen	Previous Record



TITLE: Cyclandelate in the prophylaxis of migraine: a randomized, parallel, double-blind study in comparison with placebo and propranolol. The Study group.

AUTHOR: Diener HC; Foh M; Iaccarino C; Wessely P; Isler H; Streng H; Fischer M; Wedekind W; Taneri Z

AUTHOR AFFILIATION: Department of Neurology, Universities of Essen, Germany.

SOURCE: Cephalalgia 1996 Oct;16(6):441-7

NLM CIT. ID: 97057925

ABSTRACT: Cyclandelate inhibits calcium-induced contraction of vascular smooth muscle cells, platelet aggregation induced by thrombin, platelet-activating-factor and adenosine, and also suppresses a provoked 5HT release from platelets. This pharmacological profile suggests that cyclandelate may have a potential prophylactic effect in migraine. To test this hypothesis, a double-blind multicentre study was performed in 214 patients to investigate the efficacy and tolerability of cyclandelate compared to placebo and propranolol. After a 4-week baseline period, eligible patients (randomization 3:2:3) were treated for 12 weeks with daily doses of 1.200 mg cyclandelate (n = 81), placebo (n = 55) or 120 mg propranolol (n = 78). The number of migraine attacks (> or = 50% responders) and the migraine duration/month were compared based on the difference between baseline and the last 4 weeks of prophylactic treatment. The percentage of patients with a reduction in migraine attacks of > or = 50% treated with cyclandelate (37.0%) or propranolol (42.3%) was not significantly superior to placebo (30.9%; p > 0.025). The mean duration of migraine in hours (h) per month decreased in both active treatment groups (cyclandelate: 36.8 h, p = 0.046; propranolol: 34.4 h, p = 0.039) compared to placebo (13.7 h) without reaching statistical significance (alpha/2 = 0.025). The clinical efficacy of cyclandelate and propranolol was comparable. Adverse experiences were reported by 13 patients (16.0%) treated with cyclandelate, by 5 patients (9.1%) treated with placebo and by 19 patients (24.4%) treated with propranolol. These were drug-related in 7.1% (n = 6) of patients treated with cyclandelate and in 9% (n = 7) of patients treated with propranolol. In summary, cyclandelate has a comparable efficacy to that of propranolol, an established drug of first choice in the prophylaxis of migraine. Both drugs were better than placebo, but not significantly so. Both active treatments were well tolerated.

MAIN MESH SUBJECTS: Cyclandelate/*ADMINISTRATION & DOSAGE/ADVERSE EFFECTS
Migraine/*DRUG THERAPY
Propranolol/*ADMINISTRATION & DOSAGE/ADVERSE EFFECTS
Vasodilator Agents/*ADMINISTRATION & DOSAGE/ADVERSE

ABSTRACT:

Cyclandelate inhibits calcium-induced contraction of vascular smooth muscle cells, platelet aggregation induced by thrombin, platelet-activating-factor and adenosine, and also suppresses a provoked 5HT release from platelets. This pharmacological profile suggests that cyclandelate may have a potential prophylactic effect in migraine. To test this hypothesis, a double-blind multicentre study was performed in 214 patients to investigate the efficacy and tolerability of cyclandelate compared to placebo and propranolol. After a 4-week baseline period, eligible patients (randomization 3:2:3) were treated for 12 weeks with daily doses of 1.200 mg cyclandelate (n = 81), placebo (n = 55) or 120 mg propranolol (n = 78). The number of migraine attacks (> or = 50% responders) and the migraine duration/month were compared based on the difference between baseline and the last 4 weeks of prophylactic treatment. The percentage of patients with a reduction in migraine attacks of > or = 50% treated with cyclandelate (37.0%) or propranolol (42.3%) was not significantly superior to placebo (30.9%; p > 0.025). The mean duration of migraine in hours (h) per month decreased in both active treatment groups (cyclandelate: 36.8 h, p = 0.046; propranolol: 34.4 h, p = 0.039) compared to placebo (13.7 h) without reaching statistical significance (alpha/2 = 0.025). The clinical efficacy of cyclandelate and propranolol was comparable. Adverse experiences were reported by 13 patients (16.0%) treated with cyclandelate, by 5 patients (9.1%) treated with placebo and by 19 patients (24.4%) treated with propranolol. These were drug-related in 7.1% (n = 6) of patients treated with cyclandelate and in 9% (n = 7) of patients treated with propranolol. In summary, cyclandelate has a comparable efficacy to that of propranolol, an established drug of first choice in the prophylaxis of migraine. Both drugs were better than placebo, but not significantly so. Both active treatments were well tolerated.

MAIN MESH SUBJECTS:

Cyclandelate/*ADMINISTRATION & DOSAGE/ADVERSE EFFECTS
 Migraine/*DRUG THERAPY
 Propranolol/*ADMINISTRATION & DOSAGE/ADVERSE EFFECTS
 Vasodilator Agents/*ADMINISTRATION & DOSAGE/ADVERSE EFFECTS

ADDITIONAL MESH SUBJECTS:

Adult
 Comparative Study
 Dose-Response Relationship, Drug
 Double-Blind Method
 Drug Administration Schedule
 Female
 Human
 Male
 Middle Age
 Pain Measurement
 Treatment Outcome

PUBLICATION TYPES: CLINICAL TRIAL
JOURNAL ARTICLE
MULTICENTER STUDY
RANDOMIZED CONTROLLED TRIAL

LANGUAGE: Eng

REGISTRY NUMBERS: 0 (Vasodilator Agents)

456-59-7 (Cyclandelate)

525-66-6 (Propranolol)



Order Documents

Other Years

Log off IGM

Next Record

Details of Search

Return to Results

Return to Search Screen

Previous Record

CYCLANDELATE

LD50 is greater than 2 g/kg.

It has produced ataxia, altered sleep, flushing, headache, tachycardia.

REFERENCES

1. Hester TO, Theilman G, Green W, et al. Cyclandelate in the management of tinnitus: a randomized, placebo-controlled study. *Otolaryngol Head Neck Surg* 1998; 118(3 Pt 1):329-32.
2. Sauer S, Schellenberg R, Hofmann HC, et al. Functional imaging of headache- first steps in an objective quantitative classification of migraine. *Eur J, Med Res* 1997; 2(9):367-76.
3. Aparasu RR, Fliginger SE. Inappropriate medication prescribing for the elderly by office-based physicians. *Ann Pharmacother* 1997; 31(7-8):823-9.
4. Schellenber R, Todorova A, Wedekind W, et al. Pathophysiology and psychopharmacology of dementia—a new study design. 2. Cyclandelate treatment—a placebo-controlled double-blind clinical trial. *Neuropsychobiology* 1997; 35(3):132-42.
5. Diener HC. [Migraine-diagnosis, differential diagnosis and therapy]. *Ther Umsch* 1997; 54(2):64-70.
6. Diener HC, Foh M, Iaccarino C, et al. Cyclandelate in the prophylaxis of migraine: a randomized, parallel, double-blind study in comparison with placebo and propranolol. The Study group. *Cephalalgia* 1996; 16(6):441-7.
7. Gerber WD, Schellenberg R, Thom M, et al. Cyclandelate versus propranolol in the prophylaxis of migraine—a double-blind placebo-controlled study. *Funct Neurol* 1995; 10(1):27-35.
8. Mota MC, Leite E, Ruas MA, et al. Effect of cyclospasmol on early diabetic retinopathy. *Int Ophthalmol* 1987; 10(1):3-9.
9. Cunha-Vaz JG, Reis Fonseca J, Hagenouw JRB. Treatment of early retinopathy with cyclandelate. *British Journal of Ophthalmology* 1977; 61:399-404.