been shown to be well tolerated and effective, but further studies are needed to establish their role.

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Aniracetam (USAN, rINN) ⊗

Aniracétam; Aniracetamum; Ro-13-5057. I-(4-Methoxybenzoyl)-2-pyrrolidinone

 $C_{12}H_{13}NO_3 = 219.2.$ CAS - 72432-10-1.

ATC - NO6BX11.

ATC Vet — QN06BX11.

Aniracetam is a nootropic drug that has been tried in senile dementia (p.362). It is given orally in usual doses of 1.5 g daily.

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Preparations

Proprietary Preparations (details are given in Part 3)

Arg.: Aniran; Conectol†; Pergamid; Gr.: Memodrin; Referan; Ital.: Ampamet; Draganon†.

Bifemelane (HNN)

Bifémélane; Bifemelanum; MCI-2016 (bifemelane hydrochloride). N-Methyl-4-[(α -phenyl-o-tolyl)oxy]butylamine.

Бифемелан

 $C_{18}H_{23}NO = 269.4.$

CAS — 90293-01-9 (bifemelane); 62232-46-6 (bifemelane hydrochloride).

ATC — N06AX08.

ATC Vet - QN06AX08.

Bifemelane is a nootropic that has been given orally in a usual dose of 150 mg of the hydrochloride daily in divided doses for the treatment of cerebrovascular disorders including some forms of dementia (p.362).

Preparations

Proprietary Preparations (details are given in Part 3)

Arg.: Alemelano†; Cordinal; Neurocine; Neurolea†.

Choline Alfoscerate (rINN)

Alfoscerato de colina; Choline, Alfoscérate de; Choline Alphoscerate; Choline Glycerophosphate; Cholini Alfosceras; L-α-Glycerylphosphorylcholine. Choline hydroxide, (R)-2,3-dihydroxypropyl hydrogen phosphate, inner salt.

Холина Альфосцерат $C_8H_{20}NO_6P = 257.2$ CAS - 28319-77-9 ATC - N07AX02ATC Vet — QN07AX02.

Profile

Choline alfoscerate is a precursor of acetylcholine and has been tried in the treatment of Alzheimer's disease and other dementias (below). The usual oral dose is 0.8 to 1.2 g daily in divided doses; doses of 1 g daily have been given by intramuscular or slow intravenous injection.

Dementia. Treatment with precursors of acetylcholine is not generally thought to be of benefit in dementia (p.362). However, in an analysis1 of 8 controlled clinical studies the use of choline alfoscerate in patients with dementia of the Alzheimer's type, vascular dementia, or acute cerebrovascular disease was claimed to be of some benefit. Results of a further 3 uncontrolled studies in the same review suggested that it might favour functional recovery in patients with cerebral stroke.

1. Parnetti L, et al. Choline alphoscerate in cognitive decline and in acute cerebrovascular disease: an analysis of published clinical data. *Mech Ageing Dev* 2001; **122**: 2041–55.

Preparations

Proprietary Preparations (details are given in Part 3)

Arg.: Gliatilin†; Cz.: Gliatilin†; Gr.: Gliatilin; Ital.: Brezal; Delecit; Gliatilin; Arg.: Gliatilin†; Сz.: Gliatilin†, Сл.: Спашинт, Сл.: Спашинт, Сл.: Gliatilin; Rus.: Сегерго (Церепро); Gliatilin (Глиатилин).

Codergocrine Mesilate (BAN)

Codergocrina, mesilato de; Co-dergocrine Mesilate; Codergocrine, mésilate de; Co-dergocrine Mesylate; Co-dergocrine Methanesulphonate; Codergocrini mesilas; Dihydroergotoxine Mesylate; Dihydroergotoxine Methanesulphonate; Dihydrogenated Ergot Alkaloids; Ergoloid Mesylates (USAN); Hydrogenated Ergot Alkaloids; Kodergokriinimesilaatti; Ko-dergokrin Mesilat; Kodergokrinmesilat; Kodergokrin-mesylát; Kodergokrino mesila-

CAS — 11032-41-0 (codergocrine); 8067-24-1 (codergocrine mesilate). ATC - CO4AEOI

ATC Vet — QC04AE01.

$$H_3C$$
 H_3C H_3C

 $R = CH_2C_6H_5$

 $R = CH_2CH(CH_3)_2$

 $R = CH(CH_3)CH_2CH_3$

Pharmacopoeias. In Eur. (see p.vii), Jpn, and US.

Dihydroergocristine

Dihydro- α -ergocryptine

Dihydro-β-ergocryptine

Ph. Eur. 6.2 (Codergocrine Mesilate). A mixture of dihydroergocornine mesilate ($C_{31}H_{41}N_5O_5$, $CH_4O_3S = 659.8$), dihydroergocristine mesilate, α-dihydroergocryptine mesilate, and β-dihydroergocryptine mesilate (epicriptine mesilate). It contains 30 to 35% of dihydroergocornine, 30 to 35% of dihydroergocristine, 20 to 25% of α-dihydroergocryptine, and 10 to 13% of β-dihydroergocryptine. A white or yellowish powder. Sparingly soluble in water; sparingly soluble to soluble in alcohol; slightly soluble in dichloromethane. A 0.5% solution in water has a pH of 4.2 to 5.2. Protect from light.

USP 31 (Ergoloid Mesylates). A mixture of the methanesulfonate salts of the three hydrogenated alkaloids, dihydroergocristine, dihydroergocornine, and dihydroergocryptine, in an approximate weight ratio of 1:1:1. Dihydroergocryptine mesilate