Etifoxine Hydrochloride (BANM, rINNM)

Etifoxin Hydrochloride; Étifoxine, Chlorhydrate d'; Etifoxini Hydrochloridum; Hidrocloruro de etifoxina; Hoe-36801. 6-Chloro-4-methyl-4-phenyl-3, I-benzoxazin-2-yl(ethyl)amine hydrochlo-

Этифоксина Гидрохлорид

 $C_{17}H_{17}CIN_2O,HCI = 337.2.$ CAS — 21715-46-8 (etifoxine); 56776-32-0 (etifoxine hydrochloride).

ATC — NÓ5BX03. ATC Vet — QN05BX03.

Profile

Etifoxine hydrochloride is an anxiolytic used for the short-term treatment of anxiety (p.952). It is given in usual oral doses of 150 or 200 mg daily in 2 or 3 divided doses.

Preparations

Proprietary Preparations (details are given in Part 3)

Etizolam (HNN)

AHR-3219; Étizolam; Etizolamum; Y-7131. 4-(2-Chlorophenyl)-2-ethyl-9-methyl-6H-thieno[3,2-f]-s-triazolo[4,3-a][1,4]diazepine.

 $C_{17}H_{15}CIN_4S = 342.8.$ CAS - 40054-69-1. ATC - N05BA19.ATC Vet - QN05BA19

Pharmacopoeias. In Jpn.

Etizolam is a short-acting benzodiazepine derivative with general properties similar to those of diazepam (p.986). It is given for the short-term treatment of insomnia (p.957) and anxiety disorders (p.952) in oral doses of up to 3 mg daily in divided doses or as a single dose at night.

Preparations

Proprietary Preparations (details are given in Part 3) *Ital.*: Depas, Pasaden; *Jpn*: Depas.

Febarbamate (HNN)

Fébarbamate; Febarbamato; Febarbamatum; Go-560. I-(3-Butoxy-2-carbamoyloxypropyl)-5-ethyl-5-phenylbarbituric acid.

Фебарбамат

 $C_{20}H_{27}N_3O_6 = 405.4.$ CAS - 13246-02-1. ATC - M03BA05.

ATC Vet - QM03BA05.

Febarbamate is a barbiturate with general properties similar to those of amobarbital (p.961). It has been used in the management of anxiety, insomnia, and alcohol withdrawal symptoms. However, barbiturates are no longer considered appropriate in the management of these conditions.

Tetrabamate, a complex of febarbamate, difebarbamate, and phenobarbital, has been used similarly but was associated with the development of hepatitis.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: Hung.: Atrium†.

Fluanisone (BAN, rINN)

Fluanison; Fluanisona; Fluanisoni; Fluanisonum; Haloanisone; MD-2028; R-2028; R-2167. 4'-Fluoro-4-[4-(2-methoxyphenyl)piperazin-I-vl]butvrophenone.

Флуанизон

 $C_{21}H_{25}FN_2O_2 = 356.4$

CAS — 1480-19-9. ATC — N05AD09.

ATC Vet - QN05AD09.

Pharmacopoeias. In BP(Vet)

BP(Vet) 2008 (Fluanisone). White or almost white to buff-coloured, odourless or almost odourless crystals or powder. It exhibits polymorphism. M.p. 72° to 76°. Practically insoluble in water; freely soluble in alcohol, in chloroform, in ether, and in dilute solutions of organic acids. Protect from light.

Fluanisone is a butyrophenone with general properties similar to those of haloperidol (p.1000). It has been used in the management of agitated states in psychiatric patients and as anaesthetic premedication.

Fluanisone is used in veterinary medicine for neuroleptanalgesia.

Fludiazepam (HNN)

Fludiazépam; Fludiazepamum; ID-540. 7-Chloro-5-(2-fluorophenyl)-1,3-dihydro-1-methyl-2H-1,4-benzodiazepin-2-one.

Флудиазепам

 $C_{16}H_{12}CIFN_2O = 302.7.$

CAS - 3900-31-0. ATC — N05BA17

ATC Vet — QN05BA17.

Pharmacopoeias. In Jpn.

Profile

Fludiazepam is a short-acting benzodiazepine with general properties similar to those of diazepam (p.986). It has been used in the short-term treatment of anxiety disorders

Flunitrazepam (BAN, USAN, rINN)

Flunitratsepaami; Flunitrazépam; Flunitrazepamas; Flunitrazepamum; Ro-5-4200. 5-(2-Fluorophenyl)-1,3-dihydro-I-methyl-7-nitro-I,4-benzodiazepin-2-one.

Флунитразепам

 $C_{16}H_{12}FN_3O_3 = 313.3$

CAS = 1622-62-4

ATC — N05CD03.

ATC Vet — QN05CD03.

NOTE. The following terms have been used as 'street names' (see

NOTE: The following terms have been used as 'street names' (see p.vi) or slang names for various forms of flunitrazepam:
Benzo; Circles; Date rape drug; Forget me drug; Forget pill; Forget-me pill; Forget-Me-Pill; Getting roached; La Rocha; La Roche; Lunch money drug; Mexican valium; Pingus; R2; R-2; Rey-nolds; Rib; Rick James Biatch; Roach 2; Roach-2; Roaches; Roachies; Roapies; Robital; Rochas dos; Roche; Roches; Rolpes; Roofie; Roofies; Roopies; Rope; Rophies; Rophy; Ropies: Porples; Porty Rey, Putffer: Potfles; Sadayer. Roples; Ropples; Row-shay; Ruffles; Sedexes; Wolfies

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

Ph. Eur. 6.2 (Flunitrazepam). A white or yellowish crystalline powder. Practically insoluble in water; slightly soluble in alcohol; soluble in acetone. Protect from light.

Dependence and Withdrawal

As for Diazepam, p.987.

Adverse Effects, Treatment, and Precautions

As for Diazepam, p.987.

Abuse. A WHO review1 concluded that flunitrazepam had a moderate abuse potential that might be higher than that of other benzodiazepines. It was reported that there was current evidence of widespread abuse of flunitrazepam among drug abusers, particularly among those who used opioids or cocaine.

Flunitrazepam is tasteless and odourless and has been misused to incapacitate the victim and produce amnesia in sexual assaults2 and drug-facilitated rape ('date rape').³ A 1-mg dose may produce impairment for 8 to 12 hours.⁴ Some manufacturers have incorporated a blue dye into flunitrazepam tablets to increase visibility when placed into drinks but caution is still necessary as it has been reported that blue tropical drinks and punches are being used to overcome this.3

- WHO expert committee on drug dependence: twenty-ninth report. WHO Tech Rep Ser 856 1995. Available at: http://libdoc.who.int/trs/WHO_TRS_856.pdf (accessed 21/08/08)
- Simmons MM, Cupp MJ. Use and abuse of flunitrazepam. Ann Pharmacother 1998; 32: 117–19.
- 3. National Institute on Drug Abuse. Rohypnol and GHB (issued May 2006). Available at: http://www.nida.nih.gov/PDF/Infofacts/Rohypnolof.pdf (accessed 21/08/08)
 4. Smith KM, et al. Club drugs: methylenedioxymethampheta-
- mine, flunitrazepam, ketamine hydrochloride, and γ-hydroxybutyrate. *Am J Health-Syst Pharm* 2002; **59:** 1067–76.

Breast feeding. Concentrations in breast milk the morning after a single evening 2-mg dose of flunitrazepam were considered to be too low to produce clinical effects in breast-fed infants, although accumulation in the milk might occur after repeated use. 1

1. Kanto J. et al. Placental transfer and breast milk levels of flunitrazepam. Curr Ther Res 1979; 26: 539-46

Local reactions. Of 43 patients given a single intravenous dose of flunitrazepam 1 to 2 mg, two had local thrombosis 7 to 10 days later.1 The incidence was lower than in those given diazepam [in solution]. However, there was little difference in the incidence of local reactions after intravenous use of flunitrazepam and diazepam in another study.2

- 1. Hegarty JE, Dundee JW. Sequelae after the intravenous injection of three benzodiazepines—diazepam, lorazepam, and flunitrazepam. *BMJ* 1977; **2:** 1384–5.
- 2. Mikkelsen H, et al. Local reactions after iv injections of diii, et at. Local reactions after iv injections of diazepam, flunitrazepam and isotonic saline. Br J Anaesth 1980; 52: 817–19.

Porphyria. Flunitrazepam has been associated with acute attacks of porphyria and is considered unsafe in porphyric patients.

Interactions

As for Diazepam, p.989.

Pharmacokinetics

Flunitrazepam is readily absorbed from the gastrointestinal tract. About 77 to 80% is bound to plasma proteins. It is extensively metabolised in the liver and excreted mainly in the urine as metabolites (free or conjugated). Its principal metabolites are 7-aminoflunitrazepam and N-desmethylflunitrazepam; N-desmethylflunitrazepam is reported to be pharmacologically active. The elimination half-life of flunitrazepam