

lasts for about a week. It is used in the treatment of psychoses including schizophrenia (p.955).

The usual oral dose of penfluridol for the treatment of chronic psychoses is 20 to 60 mg once a week. Doses of up to 250 mg once a week may be required in severe or resistant conditions.

**Schizophrenia.** A systematic review<sup>1</sup> concluded that penfluridol appears to have a similar efficacy and adverse effects profile to other classical antipsychotics used in the treatment of schizophrenia (p.955). The authors also suggested that penfluridol, in a weekly oral dose of 40 to 80 mg, is a suitable alternative, particularly for patients who do not respond to daily oral medication or adapt well to depot drugs.

1. Soares BGO, Lima MS. Penfluridol for schizophrenia. Available in The Cochrane Database of Systematic Reviews; Issue 2. Chichester: John Wiley; 2006 (accessed 19/03/08).

## Preparations

**Proprietary Preparations** (details are given in Part 3)

**Austria:** Semap; **Belg.:** Semap; **Braz.:** Semap; **Cz.:** Semap†; **Denm.:** Semap; **Fr.:** Semap†; **Gr.:** Flupidol; **Israel:** Semap; **Mex.:** Semap; **Neth.:** Semap; **Switz.:** Semap.

## Pentobarbital (BAN, rINN)

Aethaminalum; Mebubarbital; Mebumal; Pentobarbitaali; Pentobarbitál; Pentobarbitalis; Pentobarbitalum; Pentobarbitone. 5-Ethyl-5-(1-methylbutyl)barbituric acid.

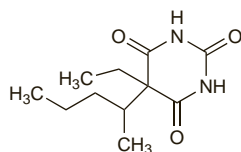
Пентобарбитал

$C_{11}H_{18}N_2O_3 = 226.3$ .

CAS — 76-74-4.

ATC — N05CA01.

ATC Vet — QN05CA01; QN51AA01.



NOTE: The following terms have been used as 'street names' (see p.vi) or slang names for various forms of pentobarbital: Blockbuster; Menish; Nebbies; Nembies; Nemish; Nemmies; Nimbies; Nimby; Yellow; Yellow bullets; Yellow dolls; Yellow jackets; Yellow submarines; Yellows.

**Pharmacopoeias.** In *Eur.* (see p.vii) and *US*.

**Ph. Eur. 6.2** (Pentobarbital). Colourless crystals or a white or almost white, crystalline powder. Very slightly soluble in water; freely soluble in dehydrated alcohol. It forms water-soluble compounds with alkali hydroxides and carbonates, and with ammonia.

**USP 31** (Pentobarbital). A white or practically white, practically odourless, fine powder. Very slightly soluble in water and in carbon tetrachloride; soluble 1 in 4.5 of alcohol, 1 in 4 of chloroform, and 1 in 10 of ether; very soluble in acetone and in methyl alcohol; soluble in benzene. Store in airtight containers.

## Pentobarbital Calcium (BANM, rINNM)

Calcii Pentobarbitalum; Pentobarbital cálcico; Pentobarbital Calciq; Pentobarbitone Calcium. Calcium 5-ethyl-5-(1-methylbutyl)barbiturate.

Кальций Пентобарбитал

$(C_{11}H_{17}N_2O_3)_2Ca = 490.6$ .

ATC — N05CA01.

ATC Vet — QN05CA01.

**Pharmacopoeias.** In *Jpn*.

## Pentobarbital Sodium (BANM, rINNM)

Aethaminalum-Natrium; Ethaminal Sodium; Mebumalnatrium; Natrii Pentobarbitalum; Pentobarbitaalinatrium; Pentobarbital sódico; Pentobarbital sodique; Pentobarbital sodná sůl; Pentobarbitalio natrio druska; Pentobarbitalnatrium; Pentobarbitál-nátrium; Pentobarbitalum natrium; Pentobarbitone Sodium; Sodium Pentobarbital; Soluble Pentobarbitone. Sodium 5-ethyl-5-(1-methylbutyl)barbiturate.

Натрий Пентобарбитал

$C_{11}H_{17}N_2NaO_3 = 248.3$ .

CAS — 57-33-0.

ATC — N05CA01.

ATC Vet — QN05CA01.

**Pharmacopoeias.** In *Eur.* (see p.vii) and *US*.

**Ph. Eur. 6.2** (Pentobarbital Sodium). A white or almost white, hygroscopic, crystalline powder. Very soluble in water. A 10% solution in water has a pH of 9.6 to 11.0 when freshly prepared. Store in airtight containers.

**USP 31** (Pentobarbital Sodium). White, crystalline granules or white powder. Is odourless or has a slight characteristic odour. Very soluble in water; freely soluble in alcohol; practically insoluble in ether. pH of a 10% solution in water is between 9.8 and 11.0. Solutions decompose on standing, the decomposition being accelerated at higher temperatures. Store in airtight containers.

**Incompatibility.** Pentobarbital may be precipitated from preparations containing pentobarbital sodium, depending on the concentration and pH. Pentobarbital sodium has, therefore, been reported to be incompatible with many other drugs particularly acids and acidic salts.

## Dependence and Withdrawal

As for Amobarbital, p.962.

## Adverse Effects, Treatment, and Precautions

As for Amobarbital, p.962.

## Interactions

As for Amobarbital, p.962.

## Pharmacokinetics

Pentobarbital is well absorbed from the gastrointestinal tract after oral or rectal doses, and is reported to be about 60 to 70% bound to plasma proteins. The elimination half-life appears to be dose-dependent and reported values have ranged from 15 to 50 hours. Pentobarbital is metabolised in the liver, mainly by hydroxylation, and excreted in the urine mainly as metabolites.

## Uses and Administration

Pentobarbital is a barbiturate that has been used as a hypnotic and sedative. It has general properties and uses similar to those of amobarbital (p.962). It has been used as a sedative and in the short-term management of insomnia (p.957) but barbiturates are not considered appropriate for such purposes. Pentobarbital sodium has also been used for premedication in anaesthetic procedures (p.1780), but barbiturates for pre-operative sedation have been replaced by other drugs. Pentobarbital is usually given as the sodium salt, although pentobarbital itself and its calcium salt have both been used.

A usual oral dose of pentobarbital sodium for insomnia was 100 to 200 mg, given at bedtime. Usual parenteral doses for other indications were 150 to 200 mg as a single intramuscular dose or 100 mg by slow intravenous injection.

**Cerebrovascular disorders.** For reference to the use of barbiturate-induced coma in the management of patients with cerebral ischaemia, see under Thiopental, p.1796. See also p.1181 for reference to the use of barbiturates in the management of raised intracranial pressure.

**Status epilepticus.** General anaesthesia may be used to control refractory tonic-clonic status epilepticus (p.469). A short-acting barbiturate such as thiopental is usually used, but pentobarbital has been used similarly.

## Preparations

**BP 2008:** Pentobarbital Tablets;

**USP 31:** Pentobarbital Elixir; Pentobarbital Sodium Capsules; Pentobarbital Sodium Injection.

**Proprietary Preparations** (details are given in Part 3)

**Canad.:** Nembutal†; **Denm.:** Mebumal; **Hong Kong:** Nembutal†; **S.Afr.:** Sopental; **Thai.:** Nembutal†; **USA:** Nembutal.

**Multi-ingredient:** **Arg.:** Dimaval; **Canad.:** Cafegot-PB†; **USA:** Cafatine-PB.

## Perazine Dimalonate

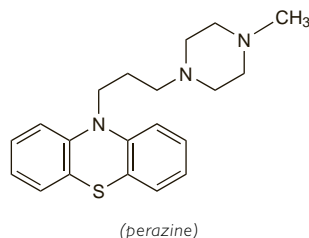
P-725 (perazine); Pemazine Dimalonate; Perazina, dimalonato de. 10-[3-(4-Methylpiperazin-1-yl)propyl]phenothiazine dimalonate.

$C_{20}H_{25}N_3S_2C_3H_4O_4 = 547.6$ .

CAS — 84-97-9 (perazine); 14777-25-4 (perazine dimalonate).

ATC — N05AB10.

ATC Vet — QN05AB10.



**Pharmacopoeias.** *Pol.* includes only an injection of the dimalonate. It also includes a monograph for Perazine Dimalate.

## Profile

Perazine dimalonate is a phenothiazine with general properties similar to those of chlorpromazine (p.969) and is used for the treatment of psychotic conditions. It has a piperazine side-chain. It is given orally as the dimalonate although doses are expressed in terms of the base; perazine dimalonate 40.3 mg is equivalent to about 25 mg of perazine. Usual doses are the equivalent of 50 to 600 mg of the base daily; up to 1000 mg daily has been given in resistant cases. It has also been given intramuscularly.

Perazine dimalate given orally has been used similarly.

**Adverse effects.** A report of 5 patients receiving perazine dimalonate who developed acute axonal neuropathies of superficial nerve fibres after exposure to sunlight.<sup>1</sup>

1. Roelcke U, *et al.* Acute neuropathy in perazine-treated patients after sun exposure. *Lancet* 1992; **340**: 729–30.

## Preparations

**Proprietary Preparations** (details are given in Part 3)

**Ger.:** Taxilan; **Pol.:** Perazin; Perazyna; Pernazinum.

## Pericyazine (BAN)

Pericazine (*pINN*); Periciazin; Periciazina; Périciazine; Periciazinum; Perisiatsini; Propericiazine; RP-8909; SKF-20716. 10-[3-(4-Hydroxypiperidino)propyl]phenothiazine-2-carbonitrile; 1-[3-(2-Cyanophenothiazin-10-yl)propyl]piperidin-4-ol.

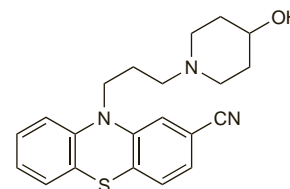
Перициазин

$C_{21}H_{23}N_3OS = 365.5$ .

CAS — 2622-26-6.

ATC — N05AC01.

ATC Vet — QN05AC01.



## Adverse Effects, Treatment, and Precautions

As for Chlorpromazine, p.969. Sedation and orthostatic hypotension may be marked.

## Interactions

As for Chlorpromazine, p.973.

## Uses and Administration

Pericyazine is a phenothiazine with general properties similar to those of chlorpromazine (p.975). It has a piperidine side-chain. It is used in the treatment of psychoses including schizophrenia (p.955) and disturbed behaviour (p.954), and in the short-term management of severe anxiety (p.952).

Pericyazine is usually given as the base but the mesilate and tartrate have also been used.

The usual oral dose for the treatment of severe anxiety, agitation, aggression, or impulsive behaviour is 15 to 30 mg daily given in 2 divided doses, the larger amount in the evening. In schizophrenia and severe psychoses initial doses of 75 mg daily may be given in divided doses, increased if necessary, at weekly intervals by increments of 25 mg, to a maximum of 300 mg daily.

A recommended initial oral dose in children aged over 1 year is 500 micrograms daily for a child weighing 10 kg; for heavier children this initial dose may be increased by 1 mg for each additional 5 kg, to a maximum total of 10 mg daily. Thereafter the dose may be gradually increased according to response but the daily maintenance dose should not exceed twice the initial dose.

Elderly patients should be given reduced doses: a recommended initial dose is 5 to 10 mg daily for anxiety or disturbed behaviour and 15 to 30 mg daily for schizophrenia or psychosis, both in divided doses.

## Preparations

**Proprietary Preparations** (details are given in Part 3)

**Arg.:** Neuleptil; **Austral.:** Neulactil; **Austria:** Neuleptil; **Braz.:** Neuleptil; **Canad.:** Neuleptil; **Chile:** Neuleptil; **Cz.:** Neuleptil†; **Denm.:** Neulactil; **Fin.:** Neulactil; **Fr.:** Neuleptil; **Gr.:** Neuleptil; **Hong Kong:** Neulactil; **Irl.:** Neulactil†; **Israel:** Neuleptil; **Ital.:** Neuleptil; **Neth.:** Neuleptil; **NZ:** Neulactil; **Rus.:** Neuleptil (Неулептил); **S.Afr.:** Neulactil†; **Spain:** Nemactil; **UK:** Neulactil; **Venez.:** Neuleptil.