

Iris Versicolor

Blue Flag; Iris Virginica.

Profile

The rhizomes of *Iris versicolor* (Iridaceae) are used in herbal preparations for skin and gastrointestinal disorders.

Homeopathy. *Iris versicolor* has been used in homeopathic medicines under the following names: *Iris*; *Iris ver*.

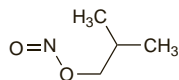
Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: UK: Catarrh Mixture; HRI Clear Complexion; Skin Eruptions Mixture.

Isobutyl NitriteC₄H₉NO₂ = 103.1.

CAS — 542-56-3.



NOTE. The following terms have been used as 'street names' (see p.vi) or slang names for various forms of isobutyl nitrite:

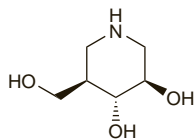
Aroma of men; Bolt; Bullet; Climax; Hardware; Krypt tonight; Locker room; Poppers; Quicksilver; Rush; Rush Snappers; Snappers; Thrust; White out; Whiteout.

Profile

Isobutyl nitrite is not used medicinally but, as with other volatile nitrites, is abused for its vasodilating and related effects following inhalation (see Abuse, under Amyl Nitrite, p.1437).

Isofagomine

AT-2101 (tartrate). (3*R*,4*R*,5*R*)-3,4-Dihydroxy-5-(hydroxymethyl)piperidine.

C₆H₁₃NO₃ = 147.2.CAS — 169105-89-9 (*isofagomine*); 161302-93-8 (*isofagomine hydrochloride*).

NOTE. The code AT-2101 has also been applied to a topical formulation of diclofenac in hyaluronic acid used in the treatment of actinic keratoses.

Profile

Isofagomine is an iminosugar under investigation as the tartrate for oral therapy of Gaucher disease (p.2249). It is a pharmacological chaperone that stabilises the variant lysosomal glucocerebrosidase facilitating its folding and transport from the endoplasmic reticulum into lysosomes, thereby increasing the pool of active endogenous enzyme.

Isometheptene Hydrochloride (BANM, rINNM) ⊗

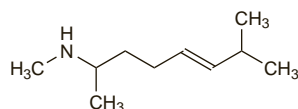
Hidrocloruro de isometepteno; Isométheptène, Chlorhydrate d'; Isomethepteni Hydrochloridum. 1,5, *N*-Trimethylhex-4-enylamine hydrochloride; 1,5-Dimethylhex-4-enyl(methyl)amine hydrochloride.

Изометептена Гидрохлорид

C₉H₁₉N.HCl = 177.7.CAS — 503-01-5 (*isometheptene*); 6168-86-1 (*isometheptene hydrochloride*).

ATC — A03AX10.

ATC Vet — QA03AX10.



(isometheptene)

Isometheptene Mucate (BANM, rINNM) ⊗

Isométheptène, Mucate d'; Isomethepteni Mucas; Mucato de isometepteno. Isometheptene galactarate.

Изометептена Мукат

(C₉H₁₉N)₂.C₆H₁₀O₈ = 492.6.

CAS — 7492-31-1.

ATC — A03AX10.

ATC Vet — QA03AX10.

Pharmacopoeias. In *Br.* and *US*.

BP 2008 (Isometheptene Mucate). A white crystalline powder. Very soluble in water; slightly soluble in dehydrated alcohol; very slightly soluble in chloroform; practically insoluble in ether. A 5% solution in water has a pH of 5.4 to 6.6. Store in airtight containers. Protect from light.

USP 31 (Isometheptene Mucate). A white crystalline powder. Freely soluble in water; soluble in alcohol; practically insoluble in chloroform and in ether. pH of a 5% solution in water is between 6.0 and 7.5.

Adverse Effects and Precautions

As for Sympathomimetics, p.1407.

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

Interactions

As for Sympathomimetics, p.1407. Isometheptene has been reported to produce severe hypertensive reactions in patients receiving MAOIs.

Bromocriptine. For a report of hypertension and life-threatening complications after use of isometheptene and *bromocriptine*, see under Sympathomimetics, p.800.

Uses and Administration

Isometheptene is an indirect-acting sympathomimetic (p.1408). It is included for its vasoconstrictor effect, usually as the mucate, in some analgesic combination products used to treat acute migraine attacks (p.616). Typical oral doses of isometheptene mucate in migraine are 130 mg at the beginning of an attack, with 65 mg hourly thereafter as necessary, up to a total maximum dose of 325 mg in a 12-hour period.

Isometheptene hydrochloride has also been used in the management of migraine and smooth muscle spasm; it has been given orally, as well as by intramuscular, or occasionally subcutaneous, or slow intravenous, injection. The mucate has also been used in the management of muscle spasms.

Preparations

USP 31: Isometheptene Mucate, Dichloralphenazone, and Acetaminophen Capsules.

Proprietary Preparations (details are given in Part 3)

Turk: Octinum.

Multi-ingredient: Braz.: Cefaldina; Doralgina; Doridina; Dorsedin; Migranette; Neomigran†; Neosaldina; Neuralgina; Sedalgina; Sedol; Tensaldin; **Hong Kong:** Midrid†; **UK:** Midrid; **USA:** Duradrin†; Midrin; MigraTen; Migratine†.

Isospaglumic Acid (rINN)

Acide Isospaglumique; Ácido isospaglúmico; Acidum Isospaglumicum; NAAGA. *N*-(*N*-Acetyl-L-α-aspartyl)-L-glutamic acid.

Изоспаглумовая Кислота

C₁₁H₁₆N₂O₈ = 304.3.

CAS — 3106-85-2.

Spaglumic Acid (rINN)

Acide Spaglumique; Ácido espaglúmico; Acidum Spaglumicum. *N*-(*N*-Acetyl-L-β-aspartyl)-L-glutamic acid.

Спаглумовая Кислота

CAS — 4910-46-7.

ATC — R01AC05; S01GX03.

ATC Vet — QR01AC05; QS01GX03.

Profile

N-Acetyl-L-aspartylglutamate is a mast cell stabiliser and has been used as the sodium or magnesium salts of spaglumic or isospaglumic acids in eye drops for allergic eye conditions and in nasal solutions for allergic rhinitis.

N-Acetyl-L-aspartylglutamate also has a role as a neurotransmitter and has been investigated in CNS disorders.

Preparations

Proprietary Preparations (details are given in Part 3)

Arg.: Naabak; **Austria:** Rhinaaxia; **Braz.:** Naabak; Naaxia; **Chile:** Alerbak; Naaxia; **Cz.:** Naaxia†; **Fr.:** Naabak; Naaxia; Naaxiafree; Rhinaaxia; **Gr.:** Rhinaaxia†; **Hong Kong:** Naaxia; **Hung.:** Naaxia; Rhinaaxia†; **Ital.:** Naaxia; Rhinaaxia; **Philipp.:** Naaxia; **Port.:** Naabak; Naaxia†; **Singapore:** Naabak; **Spain:** Naaxia; **Switz.:** Rhinaaxia†; **Turk.:** Naaxia; **Venez.:** Naabak.

Multi-ingredient: Gr.: Naaxia; **S.Afr.:** Naaxia†; **Switz.:** Naaxia.

Isoxsuprine Hydrochloride (BANM, rINNM)

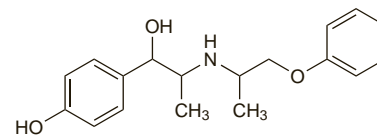
Caa-40; Hidrocloruro de isoxsuprina; Isoksupriinihydrokloridi; Isoxsuprin hydrochlorid; Isoxsuprine, chlorhydrate d'; Isoxsuprinhydroklorid; Isoxsuprini hydrochloridum; Izkssuprino hydrochloridas; Izooszuprin-hydroklorid; Phenoxyisopropylnorisuprifen. 1-(4-Hydroxyphenyl)-2-(1-methyl-2-phenoxyethylamino)propan-1-ol hydrochloride.

Изоксуприна Гидрохлорид

C₁₈H₂₃NO₃.HCl = 337.8.CAS — 395-28-8 (*isoxsuprine*); 579-56-6 (*isoxsuprine hydrochloride*).

ATC — C04AA01.

ATC Vet — QC04AA01.



(isoxsuprine)

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

Ph. Eur. 6.2 (Isoxsuprine Hydrochloride). A white or almost white crystalline powder. Sparingly soluble in water and in alcohol; practically insoluble in dichloromethane. A 1% solution in water has a pH of 4.5 to 6.0. Protect from light.

USP 31 (Isoxsuprine Hydrochloride). A white, odourless, crystalline powder. Soluble 1 in 500 of water, 1 in 100 of alcohol and of 0.1N sodium hydroxide solution, and 1 in 2500 of 0.1N hydrochloric acid; practically insoluble in chloroform and in ether. pH of a 1% solution in water is between 4.5 and 6.0. Store in airtight containers.

Adverse Effects

Isoxsuprine may cause transient flushing, hypotension, tachycardia, rashes, and gastrointestinal disturbances. Maternal pulmonary oedema and fetal tachycardia have been reported after intravenous use in premature labour.

Pulmonary oedema. Pulmonary oedema has been reported in mothers given isoxsuprine for premature labour.^{1,2}

1. Nagey DA, Crenshaw MC. Pulmonary complications of isoxsuprine therapy in the gravida. *Obstet Gynecol* 1982; **59** (suppl): 38S-42S.

2. Nimrod C, *et al.* Pulmonary edema associated with isoxsuprine therapy. *Am J Obstet Gynecol* 1984; **148**: 625-9.

Precautions

Isoxsuprine is contra-indicated after recent arterial haemorrhage. It should not be given immediately post partum, nor should it be used for premature labour if there is infection.

In women being treated for premature labour, the risk of pulmonary oedema means that extreme caution is required and the precautions and risk factors discussed under Salbutamol Sulfate, p.1132, apply.

Pregnancy. Ileus was found to be more common in the offspring of mothers who received isoxsuprine than in matched controls.¹ The incidence of respiratory distress syndrome also rose as the isoxsuprine concentration in cord blood exceeded 10 nanograms/mL; likewise the incidence of hypocalcaemia and hypotension rose progressively with increasing concentrations. The cord concentrations correlated inversely with the drug-free interval before delivery and it was suggested that with frequent assessment of uterine response it should be possible to avoid delivering infants at a time when they have high plasma-isoxsuprine concentrations.¹

In another study² of the association between ruptured membranes, beta-adrenergic therapy, and respiratory distress syndrome, it was found that both therapy with isoxsuprine and premature rupture of membranes were individually associated with a lowered incidence of respiratory distress syndrome, but when present together they resulted in an increased risk of respiratory distress syndrome. It was suggested that therapy with beta-adrenergic drugs including isoxsuprine should be restricted to patients with intact membranes.¹

1. Brazy JE, *et al.* Isoxsuprine in the perinatal period II: relationships between neonatal symptoms, drug exposure, and drug concentration at the time of birth. *J Pediatr* 1981; **98**: 146-51.

2. Curet LB, *et al.* Association between ruptured membranes, tocolytic therapy, and respiratory distress syndrome. *Am J Obstet Gynecol* 1984; **148**: 263-8.

Pharmacokinetics

Isoxsuprine hydrochloride is well absorbed from the gastrointestinal tract. The peak plasma concentration occurs about 1 hour after an oral dose. A plasma half-life of about 1.5 hours has been reported. Isoxsuprine is excreted in the urine mainly as conjugates.

Uses and Administration

Isoxsuprine is a vasodilator that also stimulates beta-adrenergic receptors. It causes direct relaxation of vascular and uterine smooth muscle and its vasodilating action is greater on the arteries supplying skeletal muscles than on those supplying skin. Isox-