

and an *N*-demethylated compound, 2',6'-pipercoloxy-lidide. Mepivacaine crosses the placenta.

See also under Local Anaesthetics, p.1852.

Pregnancy. There is considerable transfer of mepivacaine across the placenta after maternal doses and the ratio of fetal to maternal concentrations¹ is about 0.7. Although neonates have a very limited capacity to metabolise mepivacaine it appears they are able to eliminate the drug.²

- Lurie AO, Weiss JB. Blood concentration of mepivacaine and lidocaine in mother and baby after epidural anesthesia. *Am J Obstet Gynecol* 1970; **106**: 850–6.
- Meffin P, et al. Clearance and metabolism of mepivacaine in the human neonate. *Clin Pharmacol Ther* 1973; **14**: 218–25.

Uses and Administration

Mepivacaine hydrochloride is a local anaesthetic of the amide type with actions and uses similar to those described on p.1852. It is mainly used for infiltration anaesthesia, peripheral nerve block, and epidural block. (Local anaesthetic techniques are discussed on p.1853.) Mepivacaine has a rapid onset and an intermediate duration of action. The speed of onset and duration of action are increased by the addition of a vasoconstrictor and absorption into the circulation from the site of injection is reduced.

The dosage of mepivacaine hydrochloride varies with the site of injection and the type of local anaesthetic procedure. In adults, the maximum single dose of mepivacaine hydrochloride should not generally exceed 400 mg and the total dose in 24 hours should not exceed 1 g. Doses should be reduced in the elderly, in debilitated patients, and in those with cardiac or hepatic impairment. Concentrations of less than 2% should be used in children under 3 years or weighing less than about 14 kg (30 pounds); the dose in children should not exceed 5 to 6 mg/kg.

- For infiltration anaesthesia up to 400 mg as a 1% (40 mL) or 0.5% (80 mL) solution is used. For dental infiltration and nerve block a 2% solution with a vasoconstrictor or a 3% plain solution is used. For anaesthesia at a single site in the jaw a dose of 36 mg (1.8 mL) as a 2% solution or 54 mg (1.8 mL) as a 3% solution is used. For anaesthesia of the entire oral cavity 180 mg (9 mL) as a 2% solution or 270 mg (9 mL) as a 3% solution is used. Some recommend that no more than 400 mg should be given at a single dental sitting.
- For peripheral nerve blocks, namely cervical, brachial plexus, intercostal, and pudendal blocks, 1 or 2% solutions may be used in doses of 50 to 400 mg (5 to 40 mL) as a 1% solution, or 100 to 400 mg (5 to 20 mL) as a 2% solution. For pudendal block half of the dose is injected on each side. For paracervical block a dose of up to 100 mg (10 mL) as a 1% solution on each side has been suggested allowing an interval of 5 minutes between sides. This may be repeated at an interval of not less than 90 minutes, and for a combined paracervical and pudendal block up to 150 mg (15 mL) as a 1% solution is injected on each side. For therapeutic nerve block in the management of pain 10 to 50 mg (1 to 5 mL) as a 1% solution or 20 to 100 mg (1 to 5 mL) as a 2% solution may be given.
- For epidural block usual doses are: 150 to 300 mg (15 to 30 mL) as a 1% solution, 150 to 375 mg (10 to 25 mL) as a 1.5% solution, or 200 to 400 mg (10 to 20 mL) as a 2% solution. Hyperbaric solutions of mepivacaine hydrochloride without adrenaline have also been used for spinal block.

Mepivacaine has been included in the intramuscular injections of other drugs to minimise the pain produced at the injection site.

Mepivacaine has also been used as a surface anaesthetic but other local anaesthetics such as lidocaine are more effective.

Action. For a comparison of the vasoactivity of mepivacaine and some other local anaesthetics, see p.1852.

The symbol † denotes a preparation no longer actively marketed

Preparations

USP 31: Mepivacaine Hydrochloride and Levonordefrin Injection; Mepivacaine Hydrochloride Injection.

Proprietary Preparations (details are given in Part 3)

Arg.: Mepigobbi; **Austral.:** Carbocaine; Scandonest†; **Austria:** Mepinaest; Scandicain; Scandonest; **Belg.:** Scandicaine; **Canad.:** Carbocaine; Polocaine†; **Cz.:** Mepivastesin; Scandonest; **Denm.:** Carbocain; Carbopolin; Scandonest; **Fr.:** Carbocaine; **Ger.:** Meaverin; Mecain; Mepihexal; Mepivastesin; Scandicain; **Hong Kong:** Mepivastesin; **Ital.:** Carbocaina; Carboson; Mepi-Mynol; Mepibil; Mepicain; Mepident; Mepiforan; Mepisolver; Mepivamol; Mepivirg; Molcain†; Optocain; Pericain; Scandonest; **Neth.:** Scandicaine; Scandonest; **Norw.:** Carbocain; Scandonest; **Port.:** Isogaine; Mepivastesin; Scandinibsa; Scandonest; **S.Afr.:** Carbocaine; Scandonest†; **Spain:** Isogaine; Scandinibsa; **Swed.:** Carbocain; **Switz.:** Scandicain; Scandonest; **Thai.:** Mepicator; **USA:** Carbocaine; Carbocaine with Neo-Cobefrin; Isocaine; Polocaine.

Multi-ingredient: **Ger.:** Meaverin†; Thesit†.

Used as an adjunct in: **Austria:** Estradurin; **Belg.:** Estradurine; **Denm.:** Estradurin; **Fin.:** Estradurin; **Ger.:** Estradurin†; **Jpn:** Amasulin; Bestcal; Lilacilin†; Pansporin; Takesulin; **Malaysia:** Nevramin†; **Neth.:** Estradurin; **Norw.:** Estradurin; **Port.:** Linamin Plus†; **Singapore:** Nevramin; **Swed.:** Estradurin; **Switz.:** Estradurin; **Thai.:** Nevramin.

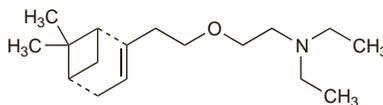
Myrtecaine (rINN)

Mirtecaína; Myrtécaïne; Myrtecaïnium; Nopoksamin; Nopoxamin. 2-[2-(10-Norpin-2-en-2-yl)ethoxy]triethylamine.

Миртекаин

C₁₇H₃₁NO = 265.4.

CAS — 7712-50-7.



Profile

Myrtecaine is a local anaesthetic (p.1850) used topically as the base or laurilsulfate in rubefacient preparations for the treatment of muscle and joint pain. Myrtecaine laurilsulfate is also used in preparations with antacids for the symptomatic relief of gastrointestinal disorders.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **Arg.:** Algesal; Flexicamin Crema†; **Austria:** Algesal; Latesy; Rheugesal; **Chile:** Sinacid; **Cz.:** Algesal; **Fr.:** Acidrine; Algesal Suractiver; **Ger.:** Acidrine†; Algesal; Algesalona†; **Gr.:** Algesal Suractiver; **Hung.:** Algesal; **Indon.:** Acidrine; Algesal Superactiver; **Ital.:** Acidrine; **Mex.:** Algesal†; **Neth.:** Algesal Forte; **Port.:** Algesal; Latesil; **Spain:** Algesal; **Switz.:** Algesal†; Algesalona†; **Turk.:** Algesal Suractiver; **Venez.:** Lemazol.

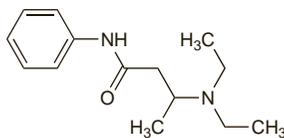
Octacaine Hydrochloride (pINN)

Hidrocloruro de octacaína; Octacaïne, Chlorhydrate d'; Octacaini Hydrochloridum. 3-Diethylaminobutyranilide hydrochloride.

Октакаина Гидрохлорид

C₁₄H₂₂N₂O₂HCl = 270.8.

CAS — 13912-77-1 (octacaine); 59727-70-7 (octacaine hydrochloride).



(octacaine)

Profile

Octacaine hydrochloride is a local anaesthetic (p.1850) that has been used for surface anaesthesia.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **Switz.:** Batramycin†.

Oxetacaine (BAN, rINN)

Oksetakaini; Oksetakain; Oxetacaína; Oxétacaïne; Oxetacainum; Oxetakin; Oxethazaine (USAN); Wy-806. 2,2'-(2-Hydroxyethylimino)bis[N-(α-dimethylphenethyl)-N-methylacetamide].

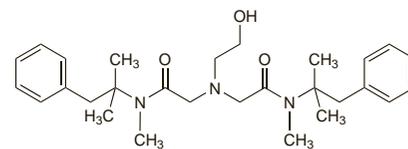
Оксетакан

C₂₈H₄₁N₃O₃ = 467.6.

CAS — 126-27-2 (oxetacaine); 13930-31-9 (oxetacaine hydrochloride).

ATC — C05AD06.

ATC Vet — QC05AD06.



Pharmacopoeias. In *Br.* and *Jpn.*

BP 2008 (Oxetacaine). A white or almost white powder. Practically insoluble in water; freely soluble in methyl alcohol; very soluble in chloroform; soluble in ethyl acetate.

Profile

Oxetacaine is an amide anaesthetic (p.1850) that is stated to have a prolonged action. It is administered orally with antacids for the symptomatic relief of gastro-oesophageal reflux disease (p.1696). It has also been used as the hydrochloride in ointments and suppositories for the relief of pain associated with haemorrhoids.

Preparations

Proprietary Preparations (details are given in Part 3)

India: Tricaine-MPS; **Ital.:** Emoren; **Jpn:** Strocain.

Multi-ingredient: **Arg.:** Mucaïne; **Austral.:** Mucaïne; **Austria:** Tepilita; **Belg.:** Muthesa; **Braz.:** Droxaine; **Canad.:** Mucaïne; **Chile:** Mucaïne†; **Cz.:** Muthesa Compositum†; **Fr.:** Mutesa; **Ger.:** Tepilita; **Gr.:** Oxaine-M; **Hong Kong:** Antacaine; Gastrocaine; Milzine†; Mucaïne; Oxema Improved; Strocain; **India:** Mucaïne; Pepticaine; **Ital.:** Gastroc†; **NZ:** Mucaïne†; **Philipp.:** Gelfazine; **S.Afr.:** Mucaïne; **Singapore:** Mucaïne; Strocain; **Spain:** Natrocitril; Roberfarin; **Switz.:** Muthesa; **Thai.:** Mucaïne; Strocain; **Turk.:** Mucaïne.

Oxybuprocaine Hydrochloride

(BAN, rINN)

Benoxinate Hydrochloride; Hidrocloruro de oxibuprocaina; Ok-sibuprokainihydroklorid; Oksibuprokain Hidroklorür; Oksibuprokaino hidrochloridas; Oxibuprokain-hidroklorid; Oxibuprokainihydroklorid; Oxybuprocaine, chlorhydrate d'; Oxybuprocaini hydrochloridum; Oxybuprokain hydrochlorid. 2-Diethylaminoethyl 4-amino-3-butoxybenzoate hydrochloride.

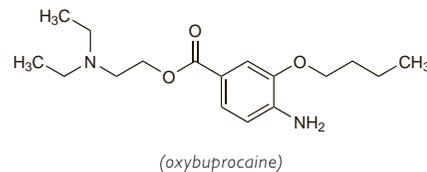
Оксибупрокаина Гидрохлорид

C₁₇H₂₈N₂O₃HCl = 344.9.

CAS — 99-43-4 (oxybuprocaine); 5987-82-6 (oxybuprocaine hydrochloride).

ATC — D04AB03; S01HA02.

ATC Vet — QD04AB03; QS01HA02.



(oxybuprocaine)

NOTE. OXB, formerly BNX, is a code approved by the BP 2008 for use on single unit doses of eye drops containing oxybuprocaine hydrochloride where the individual container may be too small to bear all the appropriate labelling information.

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

Ph. Eur. 6.2 (Oxybuprocaine Hydrochloride). A white or almost white, crystalline powder or colourless crystals. It exhibits polymorphism. Very soluble in water; freely soluble in alcohol. A 10% solution in water has a pH of 4.5 to 6.0. Protect from light.

USP 31 (Benoxinate Hydrochloride). White or slightly off-white, crystals or crystalline powder, odourless or with a slight characteristic odour. Soluble 1 in 0.8 of water, 1 in 2.6 of alcohol, and 1 in 2.5 of chloroform; insoluble in ether. A 1% solution in water has a pH of 5.0 to 6.0.

Adverse Effects, Treatment, and Precautions

As for Local Anaesthetics in general, p.1850.

Effects on the eyes. Fibrinous iritis and moderate corneal swelling occurred in 2 patients after the use of a 0.4% or 1% solution of oxybuprocaine hydrochloride for topical anaesthesia of the eye for minor surgery.¹ The effects may have been due to inadvertent entry of the drug into the anterior chamber of the eye.

- Haddad R. Fibrinous iritis due to oxybuprocaine. *Br J Ophthalmol* 1989; **73**: 76–7.

Interactions

For interactions associated with local anaesthetics, see p.1851.

Uses and Administration

Oxybuprocaine, a para-aminobenzoic acid ester, is a local anaesthetic with actions and uses similar to those described on p.1852. It is used for surface anaesthesia (p.1853) and is reported to be less irritant than tetracaine when applied to the conjunctiva in therapeutic concentrations.

Oxybuprocaine is used as the hydrochloride in a 0.4% solution in short ophthalmological procedures. One drop instilled into the conjunctival sac anaesthetises the surface of the eye sufficiently to allow tonometry after 60 seconds and a further drop after 90 seconds provides adequate anaesthesia for the fitting of contact lenses. Three drops at 90-second intervals produces sufficient anaesthesia after 5 minutes for removal of a foreign body from the corneal epithelium, or for incision of a Meibomian cyst through the conjunctiva. The sensitivity of the cornea is normal again after about 1 hour.

A 1% solution of oxybuprocaine hydrochloride is used for surface anaesthesia of the ear, nose, and throat.

Preparations

BP 2008: Oxybuprocaine Eye Drops;

USP 31: Benoxinate Hydrochloride Ophthalmic Solution; Fluorescein Sodium and Benoxinate Hydrochloride Ophthalmic Solution.

Proprietary Preparations (details are given in Part 3)

Arg.: Oftalmocaina†; **Austria:** Benoxinat; Novain; **Belg.:** Unicaine; **Braz.:** Oxinest; **Cz.:** Benoxi; Novesin; **Fin.:** Oftan Obucain; **Fr.:** Cebesine; Novesine†; **Ger.:** Benoxinat SE†; Conjuncain-EDO; Novesine; Oxbarukain†; **Hong Kong:** Benoxinate†; Novesin†; **Hung.:** Humacain; **India:** Bendzin; **Israel:** Localin; **Ital.:** Novesine; **Malaysia:** Novesin†; **Philipp.:** Oxyben; **Port.:** Anestocil; **Rus.:** Inokain (Инокан); **S.Afr.:** Novesin; **Singapore:** Novesin†; **Spain:** Prescain; **Switz.:** Cebesin; Novesin; **Thai.:** Novesin; **Turk.:** Benoxinate; Novesin.

Multi-ingredient: **Austral.:** Fluress; **Austria:** Flurekain; **Cz.:** Thilorbin†; **Fin.:** Oftan Flurekain; **Fr.:** Collu-Blache†; **Ger.:** Thilorbin; **Mex.:** Mentalgina; **NZ:** Fluress†; **Port.:** Flutest; Mebocaina; **Spain:** Anestesi Doble; Flutest; **Swed.:** Fluress; **Switz.:** Collu-Blache; Mebucaine; **UAE:** B-Cool; **USA:** Flu-Oxinate†; Fluorox; Flurate; Fluress; Fluorox.

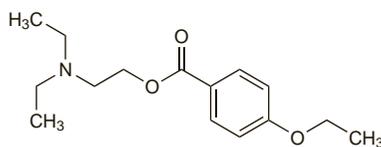
Parethoxycaïne Hydrochloride (rINNM)

Hydrocloruro de paretoxicaina; Paréthoxycaïne, Chlorhydrate de; Parethoxycaïni Hydrochloridum. 2-Diethylaminoethyl 4-ethoxybenzoate hydrochloride.

Парэтоксикайна Гидрохлорид

$C_{15}H_{23}NO_3 \cdot HCl = 301.8$

CAS — 94-23-5 (parethoxycaïne); 136-46-9 (parethoxycaïne hydrochloride).



(parethoxycaïne)

Profile

Parethoxycaïne hydrochloride, a para-aminobenzoic acid ester, is a local anaesthetic (p.1850) that has been used in pastilles for painful conditions of the mouth and throat.

Pramocaine Hydrochloride (BANM, rINNM)

Hydrocloruro de pramocaina; Pramocaine, Chlorhydrate de; Pramocaini Hydrochloridum; Pramoksiinihydrokloridi; Pramoxine Hydrochloride; Pramoxinihydroklorid; Pramoxini Hydrochloridum; Pramoxinium Chloride. 4-[3-(4-Butoxyphenoxy)propyl]morpholine hydrochloride.

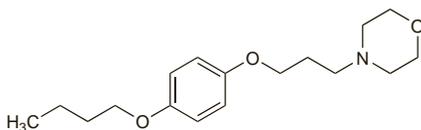
Прамочаина Гидрохлорид

$C_{17}H_{27}NO_3 \cdot HCl = 329.9$

CAS — 140-65-8 (pramocaine); 637-58-1 (pramocaine hydrochloride).

ATC — C05AD07; D04AB07.

ATC Vet — QC05AD07; QD04AB07.



(pramocaine)

Pharmacopoeias. In *US*.

USP 31 (Pramoxine Hydrochloride). A white or almost white crystalline powder; it may have a faint aromatic odour. Freely soluble in water and in alcohol; soluble 1 in 35 of chloroform; very slightly soluble in ether. A 1% solution in water has a pH of about 4.5. Store in airtight containers.

Profile

Pramocaine hydrochloride is a local anaesthetic (p.1850) used for surface anaesthesia. It is used alone or with corticosteroids and other drugs, usually in a concentration of 1%, in a wide range of formulations for the relief of pain and itching associated with minor skin conditions and anorectal disorders. Initial burning or stinging may occur following topical application. It should not be used for the nose or eyes. The base has been used similarly.

Preparations

USP 31: Neomylin and Polymyxin B Sulfates and Pramoxine Hydrochloride Cream; Pramoxine Hydrochloride Cream; Pramoxine Hydrochloride Jelly.

Proprietary Preparations (details are given in Part 3)

Fr.: Tronothane; **Israel:** Anti Itch; **Ital.:** Tronotene; **S.Afr.:** Anugestic; **Spain:** Balsabit; Pramox; **USA:** Campho-Phenique Cold Sore Treatment & Scab Relief; Fleet Pain Relief; Pramox; Prax; Proctofoam; Sama Sensitive Anti-Itch; Tronothane.

Multi-ingredient: **Arg.:** Anusol Duo; Anusol Duo S; Anusol-A; Tocorectal; **Belg.:** Nestosyl; **Canad.:** Anugestic-HC; Anusol Plus; Anuzinc HC Plus; Anuzinc Plus; Aveeno Anti-Itch; Caladryl Hemorrhoid Ointment; Onguent Hemorrhoidal; Polysporin Itch Relief; PrameGel; Pramox HC; Proctodan-HC; Proctofoam-HC; Sama-P; **Chile:** Caladryl Clear; **It.:** Anugestic-HC; Proctofoam-HC; **Israel:** Epifoam; Hemorid; Procto-Glyvenol; Proctofoam-HC; **Ital.:** Anugestic; Proctofoam†; **Mex.:** Caladryl Clear; Soyaloïd Apruni; **Neth.:** Nestosyl; **S.Afr.:** Anugestic; Proctofoam†; **UK:** Anugestic-HC; Proctofoam-HC; **USA:** I + F; Amlactin AP; Analpram-HC; Anusol; Bacine Pain Relieving Cleansing; Betadine Plus First Aid Antibiotics & Pain Reliever; Bite & Itch Lotion; Caladryl; Caladryl Clear; Cortane-B; Cortic ND; Cyotic; Enzone; Epifoam; HC Pramoxine Hemorid For Women; Itch-X; Mediotic-HC; Neosporin + Pain Relief; Novacort; Oti-Med†; Otomar-HC; Phicon; Phicon-F; PrameGel; Pramoxone; PramOtic; Preparation H; Proctofoam-HC; Sama Ultra; Summers Eve Anti-Itch; Tri-Biozene; Tri-Otic†; Tronolan; Tucks; Zone-A; Zoto-HC.

Prilocaine (BAN, USAN, rINN)

Prilocaïna; Prilocaine; Prilocainum; Prilokaiini; Prilokain; Prilokainas. 2-Propylaminopropiono-*o*-toluidide.

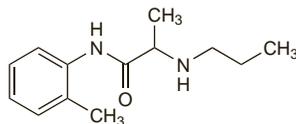
Прилокаин

$C_{13}H_{20}N_2O = 220.3$

CAS — 721-50-6.

ATC — N01BB04.

ATC Vet — QN01BB04.



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

Ph. Eur. 6.2 (Prilocaine). A white or almost white, crystalline powder. M.p. 36° to 39°. Slightly soluble in water; very soluble in alcohol and in acetone.

USP 31 (Prilocaine). A white or almost white powder or crystal aggregates. M.p. 36° to 39°. Slightly soluble in water; very soluble in alcohol and in acetone. Store at a temperature below 25°.

Eutectic mixture. Prilocaine forms a mixture with lidocaine that has a melting-point lower than that of either ingredient. This eutectic mixture is used in the preparation of topical dosage forms.

Prilocaine Hydrochloride (BANM, USAN, rINNM)

Astra-1512; Hydrocloruro de prilocaïna; L-67; Prilocaïne, chlorhydrate de; Prilocaini hydrochloridum; Prilokaiinihydrokloridi; Prilokain Hidroklorür; Prilokain hydrochlorid; Prilokain-hidroklorid; Prilokainhydroklorid; Prilokaino hydrochloridas; Propitocaine Hydrochloride.

Прилокаина Гидрохлорид

$C_{13}H_{20}N_2O \cdot HCl = 256.8$

CAS — 721-50-6 (prilocaine); 1786-81-8 (prilocaine hydrochloride).

ATC — N01BB04.

ATC Vet — QN01BB04.

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

Ph. Eur. 6.2 (Prilocaine Hydrochloride). A white or almost white, crystalline powder or colourless crystals. M.p. 168° to 171°. Freely soluble in water and in alcohol; very slightly soluble in acetone.

USP 31 (Prilocaine Hydrochloride). A white odourless crystalline powder. M.p. 166° to 169°. Soluble 1 in 3.5 of water, 1 in 4.2 of alcohol, and 1 in 175 of chloroform; very slightly soluble in acetone; practically insoluble in ether.

pH of solutions. For a discussion of the effect that pH has on the stability of local anaesthetic solutions and the pain associated with their injection, see p.1852.

Adverse Effects, Treatment, and Precautions

As for Local Anaesthetics in general, p.1850.

Prilocaine has relatively modest toxicity compared with most amide-type local anaesthetics. However, dose-related methaemoglobinaemia and cyanosis, attributed to the metabolite *o*-toluidine, appear to occur more frequently with prilocaine than with other local anaesthetics (see Methaemoglobinaemia, p.1850). Symptoms usually occur when doses of prilocaine hydrochloride exceed about 8 mg/kg but the very young may be more susceptible. Methaemoglobinaemia has been observed in neonates whose mothers received prilocaine shortly before delivery and it has also been reported after prolonged topical application of a prilocaine/lidocaine eutectic mixture in children. (See under Surface Anaesthesia in Lidocaine, p.1866 for precautions to be observed with such a eutectic mixture.) Methaemoglobinaemia may be treated by giving oxygen followed, if necessary, by an injection of methylnitronium chloride.

Prilocaine is contra-indicated for paracervical block in obstetrics.

Prilocaine should be avoided in patients with anaemia, congenital or acquired methaemoglobinaemia, cardiac or ventilatory failure, or hypoxia.

Effects on the CNS. For reference to the prilocaine serum concentrations associated with CNS toxicity, see Absorption under Pharmacokinetics, below.

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

Interactions

For interactions associated with local anaesthetics, see p.1851.

Methaemoglobinaemia may occur at lower doses of prilocaine in patients receiving therapy with other drugs known to cause such conditions (e.g. sulfonamides such as sulfamethoxazole in co-trimoxazole).

Neuromuscular blockers. For a possible interaction between mivacurium and prilocaine, see under Atracurium, p.1904.

Pharmacokinetics

Prilocaine is reported to be 55% bound to plasma proteins. It is rapidly metabolised mainly in the liver and also in the kidneys and is excreted in the urine mainly as metabolites. One of the principal metabolites excreted in the urine is *o*-toluidine, which is believed to cause the methaemoglobinaemia observed after large doses. Prilocaine crosses the placenta and during prolonged epidural anaesthesia may produce methaemoglobinaemia in the fetus. It is distributed into breast milk.

See also under Local Anaesthetics, p.1852.

Absorption. Peak serum concentrations of prilocaine hydrochloride attained after the use of 8.5 mL of a 1% solution for retrolubar and facial nerve block were well below the concentration of 20 micrograms/mL associated with CNS toxicity due to prilocaine.¹

1. Goggin M, *et al.* Serum concentrations of prilocaine following retrolubar block. *Br J Anaesth* 1990; **64**: 107-9.

Uses and Administration

Prilocaine is a local anaesthetic of the amide type with actions and uses similar to those described on p.1852. It has a similar anaesthetic potency to lidocaine. However, it has a slower onset of action, less vasodilator activity, and a slightly longer duration of action; it is also less toxic. Prilocaine hydrochloride is used for infiltration anaesthesia and nerve blocks in solutions of 0.5%, 1%, and 2%. A 1% solution is also used for epidural analgesia and a 2% solution is used for epidural anaesthesia; for intravenous regional anaesthesia 0.5% solutions are used. A 3% solution with the vasoconstrictor felypressin (p.2302) or a 4% solution without are used for dental procedures. A 4% solution with adrenaline 1 in 200 000 is also used for dentistry in