For adults and children the usual dose is 50 mg/kg daily in divided doses every 6 hours; up to 100 mg/kg daily may be given in meningitis or severe infections due to moderately resistant organisms, although these higher doses should be reduced as soon as possible. It has been recommended that treatment should be continued after the patient's temperature has returned to normal for a further 4 days in rickettsial diseases, and for 8 to 10 days in typhoid fever, to minimise the risk of relapse.

Where there is no alternative to the use of chloramphenicol, premature and full-term neonates may be given daily doses of 25 mg/kg, in 4 divided doses, and full-term infants over the age of 2 weeks may be given up to 50 mg/kg daily, in 4 divided doses. Monitoring of plasma concentrations is essential to avoid toxicity.

In patients with hepatic impairment or severe renal impairment, the dose of chloramphenicol may need to be reduced because of decreased metabolism or excretion.

In the treatment of eye infections, chloramphenicol is usually applied as a 0.5% solution or as a 1% ointment.

For bacterial infections in otitis externa, chloramphenicol has been given as ear drops in a strength of 5 or 10%.

Chloramphenicol has also been used in the form of other derivatives including the arginine succinate, the cinnamate, the glycinate, the glycinate sulfate, the palmitoylglycolate, the pantothenate, the steaglate, the stearate, and the hydrogen succinate.

Administration. When parenteral use of chloramphenicol is necessary the intravenous route is generally preferred, although the intramuscular route has been advocated. Adequate serum concentrations after intramuscular injection have been reported,[1,2] although this is contrary to the widely held belief that chloramphenicol sodium succinate is poorly absorbed by this route. Pain on injection was also claimed to be minimal.[1] After a study in children with bacterial meningitis,[3] treatment with intramuscular chloramphenicol for 2 or 3 days followed by oral therapy has been suggested, although a later study[2] found that the intramuscular route produced therapeutic concentrations when the oral route did not. However, it has been said[4] that children describe intramuscular chloramphenicol as amongst the worst treatments they ever receive, and certainly much worse than the insertion of intravenous cannulae.

1. Shann F, *et al.* Absorption of chloramphenicol sodium succinate after intramuscular administration in children. *N Engl J Med* 1985; **313:** 410–14.
2. Weber MW, *et al.* Chloramphenicol pharmacokinetics in infants less than three months of age in the Philippines and The Gambia. *Pediatr Infect Dis J* 1999; **18:** 896–901.
3. Shann F, *et al.* Chloramphenicol alone versus chloramphenicol plus penicillin for bacterial meningitis in children. *Lancet* 1985; **ii** 681–3.
4. Coulthard MG, Lamb WH. Antibiotics: intramuscular or intravenous? *Lancet* 1985; **ii:** 1015.

Enterococcal infections. Chloramphenicol has been reported to be effective against vancomycin-resistant *Enterococcus faecium*.[1-3] Although no significant effect of chloramphenicol on mortality was found in one small study,[4] a retrospective analysis[5] of the outcomes of 6 patients with bacteraemia due to vancomycin-resistant *Enterococcus faecium* concluded that chloramphenicol was effective and should be considered as a treatment option.

1. Norris AH, *et al.* Chloramphenicol for the treatment of vancomycin-resistant enterococcal infections. *Clin Infect Dis* 1995; **20:** 1137–44.
2. Papanicolaou GA, *et al.* Nosocomial infections with vancomycin-resistant Enterococcus faecium in liver transplant recipients: risk factors for acquisition and mortality. *Clin Infect Dis* 1996; **23:** 760–6.
3. Mato SP, *et al.* Vancomycin-resistant Enterococcus faecium meningitis successfully treated with chloramphenicol. *Pediatr Infect Dis J* 1999; **18:** 483–4.
4. Lautenbach E, *et al.* The role of chloramphenicol in the treatment of bloodstream infection due to vancomycin-resistant Enterococcus. *Clin Infect Dis* 1998; **27:** 1259–65.
5. Ricaurte JC, *et al.* Chloramphenicol treatment for vancomycin-resistant Enterococcus faecium bacteremia. *Clin Microbiol Infect* 2001; **7:** 17–21.

Preparations

BP 2008: Chloramphenicol Capsules; Chloramphenicol Ear Drops; Chloramphenicol Eye Drops; Chloramphenicol Eye Ointment; Chloramphenicol Sodium Succinate Injection;
USP 31: Chloramphenicol and Hydrocortisone Acetate for Ophthalmic Suspension; Chloramphenicol and Polymyxin B Sulfate Ophthalmic Ointment; Chloramphenicol and Prednisolone Ophthalmic Ointment; Chloramphenicol Capsules; Chloramphenicol Cream; Chloramphenicol for Ophthalmic Solution; Chloramphenicol Ophthalmic Ointment; Chloramphenicol Ophthalmic Solution; Chloramphenicol Otic Solution; Chloramphenicol Palmitate Oral Suspension; Chloramphenicol Sodium Succinate for Injection; Chloramphenicol, Polymyxin B Sulfate, and Hydrocortisone Acetate Ophthalmic Ointment.

Proprietary Preparations (details are given in Part 3)
Arg.: A-Solmicina-C†; Anuar; Bio-Gelin†; Bioticaps; Chloromycetin; Farmicetina; Isopto Fenicol; Klonalfenicol; Pluscloran; Poenfenicol; Quemicetina; Quotal NF†; ***Austral.:*** Chloromycetin; Chlorsig; ***Austria:*** Halomycetin; Kemicetin; Oleomycetin; ***Belg.:*** Isopto Fenicol; Kemicetina†; ***Braz.:*** Amplobiotic†; Arifenicol; Auridonal†; Clorafenil; Cloranfenil†; Farmicetina†; Feniclor†; Fenicloran†; Neo Fenicol; Profenicol; Quemicetina; Sintomicetina; Uni Fenicol; Visalmin; Vixmicina; ***Canad.:*** Chloromycetin; Diochloram†; Pentamycetin; ***Chile:*** Chloromycetin; Clorampast; Gemitin; Quemicetina†; ***Fin.:*** Chloromycetin; Oftan Akvakol; Oftan Chlora; ***Fr.:*** Cebenicol†; ***Ger.:*** Aquamycetin-N†; Chloramsaar N†; Oleomycetin†; Paraxin; Posifenicol C; Thilocanfol C; ***Gr.:*** Chloranic; Ursa-Fenol; ***Hong Kong:*** Aristophen; Chloment†; Chloroph; Chlorsig; Europhenicol; Kemicetine; Spersanicol†; Vista-Phenicol†; Xepanicol; ***Hung.:*** Chlorocid†; ***India:*** Biophenicol; Chloraxin; Chloromycetin; Kemicetine Otological†; Kemicetine†; Paraxin; Reclor; Vanmycetin; Vitamycetin; ***Indon.:*** Chloramex; Chlorbiotic; Cloramidina; Colain; Colme; Combicetin; Empeecetin; Enkacetyn; Fenicol; Ikamicetin; Isotic Salmicol; Kalmicetine; Kemicetine; Lanacetine; Licoklor; Microtina; Neophenicol; Palmicol; RECO; Ribocine; Spersanicol; Suprachlor; Xepanicol; ***Irl.:*** Chloromycetin; ***Israel:*** Chloroptic; Chlorphenicol; Phenicol; Synthomycine; ***Ital.:*** Chemicetina; Cloramfen†; Mycetin; Sificetina; Vitamfenicolo; ***Malaysia:*** Beaphenicol; Nicol; Spersanicol†; Xepanicol†; ***Mex.:*** Abefen; Alcan†; Bariclor; Brocil; Chloromycetin; Clomicin; Clorafen; Cloramed; Cloramfeni; Clorampler; Cloran; Cloranmicron; Clorazin; Clordil; Clorfenil; Clorofunon; Clorotan; Diarman; Dilclor; Estreptopal; Exacol; Fenicol; Fenisol; Fenizzard; Lebrocetin; Leclor A; Naxo; Oftadil; Omycet; Palcol; Palmiclor; Palmifer; Palmisol; Proclonil; Pronicol; Quemicetina; Uniclor; Vixin†; ***Neth.:*** Globenicol†; ***NZ:*** Chloromycetin; Chlorsig; Isopto Fenicol†; ***Philipp.:*** Anphechlor; Aphrenil; Biomycetin; Chloro-S; Chloromycetin; Chlorsig; Clovicol; Esnicol; Fen-Alcon; Forastrol; Genphenil; Gerafen; Kemicetine; Klorfen; Medimycetin; Metrophenicol; Oliphenicol; Optomycin; Pediachlor; Penachlor; ***Pol.:*** Detreomycyna; ***Port.:*** Clorocil; Dermimade Cloranfenicol; Fenoptic†; Micetinoftalmina; ***Rus.:*** Synthomycin (Синтомицин); ***S.Afr.:*** Chloramex; Chlorcol; Chloromycetin; Chloroptic†; Chlorphen; Lennacol; Spersanicol; ***Singapore:*** Beaphenicol†; Isopto Fenicol; Kemicetine; Spersanicol†; Vanafen-S†; ***Spain:*** Chemicetina; Chloromycetin†; Cloranfenic†; Normofenicol†; ***Swed.:*** Chloromycetin; ***Switz.:*** Septicol; Spersanicol†; ***Thai.:*** Antibi-Otic; Archifen; Chloracil; Chloramno; Chloroph; Chlorosin; Cogenate; Cogetine; Fenicol†; Generin; Kemicetine†; Koro†; Levomycetin; Mycochlorin; Nicolmycetin†; Opsaram†; Pharmacetin; Silmycetin; Synchlolim; Unison Ointment; Vanafen; ***Turk.:*** Armisetin; Kemicetine; Klorasuksinat; ***UK:*** Brochlor; Chloromycetin; Golden Eye; Kemicetine; Optrex Infected Eyes; ***USA:*** Ak-Chlor†; Chloromycetin; Chloroptic†; ***Venez.:*** Chloromycetin†; Cloftal; Cloramfesa†; Quemicetina†.

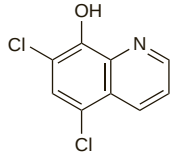
Multi-ingredient: ***Arg.:*** Acnoxin; Antiflogol; Bioftal; Clorfibrase; Colirio Antibiotico CNH; Esodar; Eubetal Biotic†; Fluoropoen; Iruxol; Klonovan; Neocortizul; Oftal; Oftalmoflogol†; Poenbioptal; Quemicetina con Hidrocortisona; Quemicetina Nasal Compuesta; Vistacloran†; ***Austria:*** Cortison Kemicetin; Oleomycetin-Prednison; ***Belg.:*** De Icol; ***Braz.:*** Dermofibrin C†; Dexaclor†; Dexafenicol; Epitezan; Fenidex; Fibrase; Fibrinase c/Cloranfenicol; Gino-Fibrase; Gyno Iruxol; Iruxol; Kollagenase com cloranfenicol; Naxogin Composto; Oto-Biotic†; Otofenicol-D†; Otomicina; Otopen†; Ouvidonal; Procutan†; Regencel; Regenom; Sulnil; ***Canad.:*** Pentamycetin-HC; ***Chile:*** Cortifenol H†; Gemitin con Prednisolona; Naxogin Compositum; Otandrol; Sintoftona; Spersadex Comp†; ***Cz.:*** Betabioptal†; Spersadex Compositum; ***Denm.:*** Spersadex Comp; ***Fin.:*** Iruxol; Oftan C-C; Oftan Dexa-Chlora; ***Fr.:*** Cebedexacol; ***Ger.:*** Aquapred; Berlicetin; Ichthoseptal; Oleomycetin-Prednison†; Spersadex Comp†; Spersadexolin†; ***Gr.:*** Chlorapred; Cortiphenol H; Dexachlor; Dispersadron-C; Geypirina; Nezefib; Spersadexoline†; Sulfachloramphenicol; Sulfanicole; ***Hong Kong:*** Chlomy-P†; Chloram-D; Cortiphenol H; Eurodron; Ginetris†; Neo-Dex (Improved); Sonexa-C; Spersadex Comp; Spersadexoline†; ***Hung.:*** Chlorocid-H†; Spersadex Comp†; ***India:*** Belmycetin-C; Candibiotic; Chlormixin; Chloromycetin Ear Drops; Cortison Kemicetine†; Dexosyn-C; Kemicetine Antiozena; Kemicetine Otological†; Ocupol; Ocupol-D; Otek-AC+; Otek-AC†; Paraxin Ear†; Perfocyn; Pyrimon; ***Indon.:*** Chloramphecort; Chloramphecort-H; Colsancetine; Gynoxa; Indoson; Kemiderm; Kloramixin; Kloramixin D; Klorfeson; Naxogin Complex; Otolin; Particol; Ramicort; Spersadex Comp; ***Israel:*** Phenimixin; Tarocidin; Tarocidin D; Threolone; ***Ital.:*** Antibioptal; Betabioptal; Cloradex; Colbiocin; Cortison Chemicetina; Cosmiciclina; Dexoline; Eubetal Antibiotico; Idracemi; Iruxol; Vasofen; Vitecaf; Xantervit Antibiotico; ***Malaysia:*** De Icol; Spersadex Comp†; Spersadexoline; ***Mex.:*** Cloran Otico; Cloxona-O; Fibrase; Levodexan; Levofenil; Nispil; Ofodex; Otalgan; Otifar; Otolone†; Poral; Pre Clor; Soldrin; Solfranicol; Sulfa Cloran; Trecloran; Ulcoderma; ***Norw.:*** Spersadex med kloramfenikol; ***Philipp.:*** Dexanicol; Spersadex Compound; ***Port.:*** Cloranpectina†; Clorcorticil†; Medrivas Antibiotico; Predniftalmina; ***Rus.:*** Candibiotic (Кандибиотик); Colbiocin (Колбиоцин); Cortomycetin (Кортомицетин); Iruxol (Ируксол); Levomecol (Левомеколь); Levosin (Левосин); ***S.Afr.:*** Covomycin; Covomycin-D; Covotop; Spersacet C†; Spersadex Comp; Spersadexoline; ***Singapore:*** Spersadex Comp†; Spersadexoline†; ***Spain:*** Blefarida; Cloram Zinc; Cloran Hemidex; Cortison Chemicet Topica; Dermisone Epitelizante; Dexam Constric†; Fluo Fenic; Icol; Medrivas Antib; Otosedol Biotico; Predni Azuleno; ***Switz.:*** Spersacet C†; Spersadex Comp; Spersadexoline†; ***Thai.:*** Archifen; Chlorotracin; Dermasol; Levoptin; Spersadexoline; Vagicin; ***UK:*** Actinac; ***Venez.:*** Clorasona; Deicol†; Otandrol†.

Chloroxine *(USAN)*

Cloroxinum; 5,7-Dichlorochinolin-8-ol; 5,7-Dichloroquinolin-8-ol; Kloroxin.

Хлороксин

$C_9H_5Cl_2NO$ = 214.0.
CAS — 773-76-2.



Profile
Chloroxine is a halogenated hydroxyquinoline with antibacterial and antifungal properties similar to those of clioquinol (p.254). It is used topically in the treatment of dandruff and seborrhoeic dermatitis of the scalp. It has also been given orally in preparations for gastrointestinal disorders.

Choroxine is a component of halquinol (p.286).

Preparations

Proprietary Preparations (details are given in Part 3)
Cz.: Endiaron; ***USA:*** Capitrol.

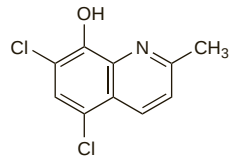
Multi-ingredient: ***Cz.:*** Endiform†; Triaderm; Triamcinolon Compositum†; Triamcinolon E; Triamcinolon-Galena†; ***Ital.:*** Beben Clorossina.

Chlorquinaldol *(BAN, rINN)*

Chlorochinaldol; Chlorquinaldolum; Clorquinaldol; Kloorikinaldoli; Klorkinaldol. 5,7-Dichloro-2-methylquinolin-8-ol.

Хлорхинальдол

$C_{10}H_7Cl_2NO$ = 228.1.
CAS — 72-80-0.
ATC — D08AH02; G01AC03; P01AA04; R02AA11.
ATC Vet — QD08AH02; QG01AC03; QR02AA11.



Pharmacopoeias. In *Pol.*

Profile
Chlorquinaldol is a halogenated hydroxyquinoline with properties similar to those of clioquinol (p.254). It is mainly applied topically in infected skin conditions and in vaginal infections.

Preparations

Proprietary Preparations (details are given in Part 3)
Hung.: Chlorosan†; ***Venez.:*** Agel†.

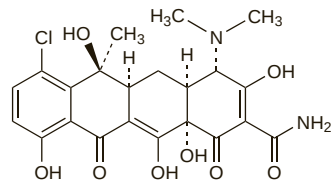
Multi-ingredient: ***Arg.:*** Nerisona C; ***Braz.:*** Bi-Nerisona; ***Chile:*** Bi-Nerisona; ***Cz.:*** Colposeptine†; Proctospre†; ***Denm.:*** Locoidol; ***Fin.:*** Locoidol†; ***Fr.:*** Nerisone C; ***Ger.:*** Nerisona C†; Proctospre†; ***Hong Kong:*** Colposeptine; Nerisone C; ***Indon.:*** Nerisona Combi; ***Irl.:*** Locoid C; ***Israel:*** Multiderm; ***Ital.:*** Impetex; Nerisona C; ***Mex.:*** Bi-Nerisona; ***Norw.:*** Locoidol; ***NZ:*** Locoid C; Nerisone C; ***Philipp.:*** Nerisona Combi; ***Pol.:*** Chlorchinaldin H; Gynalgin; Laticort-CH; ***Port.:*** Locoid C†; Nerisona C; Trophoseptine; ***Rus.:*** Gynalgin (Гиналгин); ***Singapore:*** Nerisone C†; ***Spain:*** Amplidermis; Claral Plus; Quinortar†; ***Switz.:*** Anginazol; ***Turk.:*** Colposeptine; Impetex; Nerisona C; ***UK:*** Locoid C; ***Venez.:*** Binerisona.

Chlortetracycline *(BAN, rINN)*

Chlortétracycline; Chlortetracyclinum; Clortetraciclina; Kloritetrasykliini; Klortetracyclin. (4*S*,4a*S*,5a*S*,6*S*,12a*S*)-7-Chloro-4-dimethylamino-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxonaphthacene-2-carboxamide; 7-Chlorotetracycline.

Хлортетрациклин

$C_{22}H_{23}ClN_2O_8$ = 478.9.
CAS — 57-62-5.
ATC — A01AB21; D06AA02; J01AA03; S01AA02.
ATC Vet — QA01AB21; QD06AA02; QJ01AA03; QJ51AA03; QS01AA02.



Chlortetracycline Bisulfate *(rINNM)*

Bisulfato de clortetraciclina; Chlortétracycline, Bisulfate de; Chlortetracycline Bisulphate *(BANM)*; Chlortetracyclini Bisulfas.

Хлортетрациклина Бисульфат

Pharmacopoeias. In *US* for veterinary use only.
USP 31 (Chlortetracycline Bisulfate). Store in airtight containers. Protect from light.