



Dejando huella en la
Industria de la Salud Animal

DOXIPETS 100®

REGISTRATION NUMBER Q-7972-170

Formula:

Each tablet contains:

Doxycycline hylate.....120 mg

Excipient c.b.p.....1 tablet

Presentation:

DOXIPETS 100® Box with 20 and 100 tablets.



INDICATIONS:

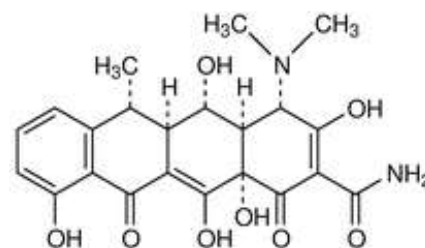
DOXIPETS 100® is a semisintetic antibiotic of the group of broad-spectrum tetracyclines that acts against gram-positive and gram-negative, aerobic and anaerobic bacteria well controls diseases caused by rickettsias, canine ehrlichiosis, chlamydia and mycoplasmas.

DOXIPETS 100® it is indicated for the treatment of infections: of the respiratory tract (rhinitis, tonsillitis and bronchopneumonia), of the urogenital system (cystitis, metritis and prostatitis); of the skin (suppurative dermatitis, abscesses and infected wounds).

It can also be used for the treatment of: gastroenteritis, otitis, pododermatitis, leptospirosis, anaplasmosis, diarrhea and post-operative prophylaxis.

CHEMICAL FORMULA $C_{22}H_{24}N_2O_8$

Doxycycline hyclate is a crystalline, yellow, hygroscopic powder. Easily soluble in water and methanol, soluble in solutions of hydroxides and alkaline carbonates, quite soluble in 96% ethanol. Melting point: approx. 201 °C which makes it very stable, it is also very lipophilic



DOXIPETS100® acts against intracellular bacteria such as: rickettsias (Ehrlichia canis, Ehrlichia spp), amoebas, Mycoplasmas, Chlamydia (psittacosis) and leptospira (leptospira sp), being the treatment of choice in cases of erlichiosis.

Also among the organisms sensitive to DOXIPETS 100® we find: streptococcus, pneumococcus, gonococcus, Salmonella sp., Campylobacter sp., Shigella sp., klebsiella pneumoniae, Brucella sp., Haemophilus influenza and Haemophilus pertusis.

Moderately sensitive bacteria are: Escherichia coli, Pasteurella sp., meningococcus and Bacillus anthracis.

It is also used as part of the treatment of Dilofilaria Immitis, since dilofilara is infected by an endosympinant bacterium) Wolbachia spp and when the parasite dies it can cause an immunological reaction

MECHANISM OF ACTION:

Doxycycline is bacteriostatic against a wide variety of both Gram-positive and Gram-negative microorganisms. They penetrate the cells by passive diffusion mechanisms through hydrophobic channels (porins) and by energy-dependent active transport, once inside the cell, it binds to the 30S ribosomal subunits the result inhibiting protein synthesis. It also has a broad spectrum against most mycoplasmas, spirochetes, Borrelia burgdorferi (Lyme disease), Chlamydia and Rickettsias (erlichiosis).



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The bacteria that can show resistance are: Proteus, Pseudomonas, Aerobacter aerogenes, Streptococcus faecalis and some strains of staphylococcus.

It has been seen in humans that it has anti-inflammatory properties that in certain diseases such as breast cancer, respiratory problems, and especially in dermatological problems, so it can be very useful: Low levels of IgE in asthmatic and allergic patients, Decreases allergies by decreasing the production of mastitis through the p12k-akt pathway. Decreases free radicals. Decreases Kinase C in granulomas. It disstifies phospholipase A2 (which is released in inflammatory processes by arachidonic Ac). In osteoarthritis, nitric oxide decreases. It can act as an inhibitor of MMP-2, 3, 8, 9 and 13. (metalloproteases) (breast cancer).

Pharmacokinetics:

Doxycycline can be administered orally, sublingually, intravenously and intragingivally. After oral administration, doxycycline is absorbed into the stomach and initial portion of the small intestine by 90 to 100%. With most foods it improves its absorption but is affected in the presence of some foods such as: milk, antacids based on aluminum and iron salts, due to the lation of cations.

The distribution of doxycycline is wide due to its high degree of liposolubility, it diffuses throughout the body, mainly in the spleen, liver, lungs and a small amount in cerebrospinal fluid, it also crosses the placental barrier. Its binding to plasma proteins in dogs is approximately 75 to 86%, being higher in cats. It is eliminated mainly via gastrointestinal (feces) and in a minimum proportion via the renal.

Within 1.5 to 4 hours after administration, plasma concentrations range from 1.5 to 3.6 µg/ml. Its half-life in dogs is approximately 10 to 12 hours and its elimination is around 1.7 ml/kg/min. Its elimination half-life ranges from 14 to 24 hours depending on whether administered in a single or repeated dose and increases to 17-30 hours in patients with renal impairment.

Species: Canines and felines

Route of Administration: Oral

DOSE 10 mg/kg body weight

DOXIPETS 100® one tablet per 12 kg of body weight, every 24 hours.

It is recommended to administer together with food, this will avoid nausea and gastrointestinal effects. In addition to that it improves its absorption

In the case of canine Ehrlichiosis the treatment can be from one to three months. In Lyme disease: 20-28 days.

For patients with leptospirosis: it is the same dose, after the application of penicillin G (25000-40000 IU/kg IV or IM every 12 hrs. for a period of 14 days).

In cases of Dirofilaria infestation it is recommended before starting curative treatment to start with doxycycline to avoid endotoxemia for 3 to four weeks

Cats:

It is the same dose one tablet per 12 kg of body weight, every 24 hours,

It can be used for feline Haemobartonellosis, hemoplasmosis: for 3 to 4 weeks. Feline Ehrlichiosis or anaplasmosis: for 21 days. Toxoplasma gondii: for 4 weeks. Bartonellosis: 50 mg (total dose) every 12 hrs for 14-28 days. And it is recommended that after its administration at least 6 ml of water or porridge be administered.



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Drug interactions:

Simultaneous administration of doxycycline may increase the bioavailability of digoxin.

It can interfere with the bactericidal activity of penicillin, cephalosporin and aminoglycosides. Baking soda, kaolin, pectin and bismuth subsalicylate may alter their absorption when co-administered orally.

The neurotoxic effect of methoxyfluorane is increased if administered in conjunction with doxycycline.

It can interfere with the bactericidal activity of penicillin, cephalosporin and aminoglycosides.

Contraindications:

Its use in puppies can lead to permanent yellowing of the teeth.

It should be avoided in severe liver disease.

Side effects:

Nausea and vomiting may occur, however this can be avoided by administering it with food and/or water.

Warnings:

In long treatments they can cause gastrointestinal disorders such as diarrhea, nausea and vomiting, which cease when treatment is stopped. Administer under strict supervision of the Veterinarian. Do not administer to pregnant females or to animals under 4 weeks of age.

Keep in a dry place, cool at no more than 30°C and protected from direct sunlight. Do not leave it within reach of children, pets and disabled people. Product for exclusive use in veterinary medicine.

Consult the Veterinary Zootechnician Exclusive literature for Veterinarians. Its sale requires a prescription. Content managers: Technical Department.

Bibliography

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Sumano L.H, Ocampo C.L and Gutiérrez O.L. Veterinary Pharmacology. 4th ed. Designs and Impressions Aranda S. A. de C. V. 2015
GLP

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