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## Antibiotics safe for use in rabbits



Kim Chilson

Georgie showing the red irritated skin in his neck (arrow), caused by long-term injections of penicillin.

Skin irritation or formation of sterile abscesses after subcutaneous injection of antibiotics like penicillin or enrofloxacin (Baytril) is possible. When the antibiotic is dissolved in a water-based solution, e.g., enrofloxacin, the formation of sterile abscesses can be avoided by diluting the amount to be given by the same amount of a sterile saline solution. Beside sterile abscesses, the use of Baytril over longer periods of time may lead to muscle necrosis.

Fluoroquinilone antibiotics can moreover lead to cartilage

damage of the cartilage and damage of joints (arthropathy) when used over a longer period in young rabbits.



Ivana Milošević

Sterile abscess in a rabbit, after injection of enrofloxacin

Name of antibiotics	Remarks	Dosage	Way	Frequency
Amikacin	Nephrotoxic in dehydrated rabbits.	5-10 mg/kg	SC, IM, IV	sid, bid, tid
		8-16 mg/kg	SC, IM, IV	sid, bid, tid
Amoxicillin (see: Remarks)	*ONLY* as injection, never orally. Has recently been successfully used in rabbits, to treat infections due to bacteria, whose sensitivity tests	15 mg/kg (?)	SC, IM	q second day

	indicate that amoxicillin is the only effective antibiotic. No adverse reaction has been noted with injected treatment. *Never* give orally; this has fatal consequences. Is used sometimes to treat treponematosi.			
Azithromycin	Recommended for difficult to treat URI. May lead to a reduction of appetite.	30 - 50mg/kg	PO	sid
Bicillin in Units (penicillin G procaine and penicillin G benzathine) (see: Remarks)	*ONLY* as injection. for treatment of bacterial infections. In rare cases, penicillin treatment leads to: - a decreased appetite, - the formation of sterile abscesses.	47.000 - 84.000 IU/kg	SC	q 2 <sup>nd</sup> /3 <sup>rd</sup> day
Bicillin in mg/kg (penicillin G procaine and penicillin G benzathine) (see: Remarks)	*ONLY* as injection. for treatment of bacterial infections. In rare cases, penicillin treatment leads to: - a decreased appetite, - the formation of sterile abscesses.	20 mg/kg (procaine) + 15 mg/kg (benzathine)	SC	q 2 <sup>nd</sup> /3 <sup>rd</sup> day
Cephalexin (see: Remarks)	*ONLY* as injection. Normally no cross reaction with Penicillin, in some cases of renal failure > nephrotoxic	10-15 mg/kg	SC	bid, tid
		20 mg/kg	SC	sid
Chloramphenicol	Exceptionally leads to a decreased appetite	30-50 mg/kg	PO, SC, IM	bid
		15 mg/kg	PO	bid
Chlortetracycline	.	50 mg/kg	PO	bid
Ciprofloxacin	Hindered absorption, when concurrent administration of antacids.	5 - 20 mg/kg	PO	sid, bid
Clopidol	.	200 mg/kg food	.	.
Danofloxacin	.	1 - 5 mg/kg (?)	IM	.
		5 mg/kg (?)	SC	.
Difloxacin	.	5 - 10 mg/kg (?)	PO	.
		2,5 - 5 mg/kg	SC, IM	.
Dimetridazole	.	0.2 mg/ml water	PO	q 12 h.
Doxycycline	.	2.5 mg/kg	PO	bid
		4 mg/kg	PO	sid
Enrofloxacin (see: Remarks)	High dosage treatment (20 mg/kg) over a longer period of time may lead to seizure. Cartilage damage in juveniles. In rare cases, enrofloxacin treatment leads to: - a decreased appetite,	5 - 15 mg/kg	PO, SC, IM	bid-sid

	- the formation of sterile abscesses, if injected. This can be avoided by diluting the solution with a sterile saline solution, 50:50.			
Fusidic acid	In eye ointment	1 drop/eye	.	.
Gentamycin (see: Remarks)	Best avoided for use in rabbits Depending on dosage: Ototoxicity Nephrotoxic, neuromuscular block	5 – 8 mg/kg	SC, IM, IV	q 8-12 h.
		1-2 drops/eye	.	tid
Marbofloxacin	Cartilage damage in juveniles	2 – 5 mg/kg	PO	sid
Metronidazole	3 to 5 days	20 mg/kg	PO	bid
Neomycin	Depending on dosage: ototoxicity Nephrotoxic, neuromuscular block	30 mg/kg	PO	bid
Oxytetracycline	.	15 mg/kg	SC, IM	sid, tid
		50 mg/kg	PO	bid
Penicillin G procaine	<i>*Only*</i> as injection. For the treatment of Treponematosis	20.000 – 60.000 IU/kg	SC, IM	q 48 h. to q once per week
Robenidine	.	50-66 mg/kg feed	.	.
Spiramycin (see: Remarks)	Recommended for difficult to treat URI Cecal enlargement has been observed, with dosage of 200 and 400 mg/kg	1 ml/kg 25 mg/kg	SC, IM	.
Streptomycin	Depending on dosage: Ototoxicity Nephrotoxic, neuromuscular block	50 mg/kg	IM	sid
Sulfadimidene	.	1 – 5 mg/ml water	.	..
Sulfamethazine	.	100-233 mg/l water	.	.
Tetracycline	May lead to a reduction of appetite.	50 mg/kg	PO	q 8-12 h.
Trimethoprim Sulfa	.	15 - 30 mg/kg	PO	bid
		48 mg/kg	SC	bid
Toltrazuril	q 24 the first 2 days, repeat after 2 days	25 mg/kg	PO	q 24 h.
Tylosin (see: Remarks)	A test dose of 5 mg/kg should be give to check that no adverse reaction takes place.	10 mg/kg	PO, SC, IM	bid

for the meaning of the abbreviations, click [here](#).

#### Further information

Dana G. Allen, J. K Pringle, Dale A. Smith, Handbook of Veterinary Drugs. Lippincott – Raven 1998.

Elizabeth V. Hillyer and Katherine E. Quesenberry, Ferrets, Rabbits, and Rodents: Clinical Medicine and Surgery. New York: WB Saunders Co. 1997.

Frances Harcourt-Brown, Rabbit Medicine and Surgery. Butterworth-Heinemann 2001.

Kathy Laber-Laird, Paul Flecknell and M. Michael Swindle, Handbook of Rodent and Rabbit Medicine. Oxford, UK: Pergamon Press 1996.

John E. Harkness and Joseph E. Wagner, The Biology and Medicine of Rabbits and Rodents. New York: Lippincott Williams & Wilkins 1995.