

ACBA: Health

ANTIBIOTICS

What I Use

by Valerie Blaes, DVM

I will discuss the commonly used antibiotics for cavies and describe several medical situations where I would, or have, used them. I must point out that each individual medical case is unique and treatment is based on the situation in that case. I don't routinely use antibiotics for every cough, snuffle or runny nose. I very rarely use antibiotics in pregnancy toxemia cases or for small abscesses, usually only for larger cervical abscesses where they may impair the throat/trachea, or when transmission to other animals is possible.

Trimethoprim Sulfamethoxazole (SMZ-TMP, DiTrim,

Bactrim, Tribrissen): My first choice in almost all cases. It is a very good drug for respiratory and urinary tracts, as well as the skin. I also use it for diarrhea cases where the animal is obviously feeding poorly. The oral suspension is usually concentrated at 48 mg/ml, dosage is .3 -.5ml per pound (#) bodyweight (BW) per day. It is usually available at human pharmacies.

Baytril (Enrofloxacin): My second choice when I have a situation resistant to SMZ-TMP or can only use the injectable form. It has a wider spectrum than SMZ-TMP and comes in tablet form as well. The dosage is the same for dogs and cats, 1ml/20#BW, injected once daily, or tablets as noted for tablet size (No. 5 is per 5#BW). Tablets can be dissolved in water or other liquid and given orally twice daily. This should not be used in growing animals.

The new dosage for Baytril is 5-10mg/kg bodyweight (or 2-4 mg/#). This drug is not effective against *Streptococcus* sp. of bacteria.*

Chloramphenicol (Chloromycetin Palmitate): A very effective antibiotic, especially for respiratory infections. The oral suspension has limited availability, but the tablet form can be obtained at most veterinary offices. This drug has been shown to cause aplastic anemia in humans with prolonged exposure. Dosage is 25mg/#BW 3 times daily.

Gentocin/Amikacin: These two drugs are in the same class of antibiotics and are what I consider to be the "big guns". They are extremely hazardous to the

kidneys and can potentially cause fatal antibiotic-induced diarrhea in cavies. I personally use Amikacin because its side effects are reported to be less severe than Gentocin. only use this drug when I suspect an infection with *Pseudomonas*, as with cases of seminal vesiculitis I've seen, and in abscesses with culture results indicating such infection. I feel these drugs are often more harmful than helpful in other situations. The dosage is 1mg/#BW once daily (and it does burn).

Tetracycline/Oxytetracycline (Terramycin): This class of drugs is not very effective against most infections but may have some effect on respiratory problems caused by certain microorganisms. These drugs have been indicated in causing some antibiotic-induced diarrhea. I have recommended oxytetracycline powder (Terramycin) as a herd treatment for nonspecific upper respiratory and eye infections affecting a large percentage of the animals, or when infection-prone animals are going to be stressed. Oral suspension dose is 25mg/#BW divided into 4 equal doses. Terramycin powder is mixed at 1tbl/gallon of water. Watch for refusal of the water. Sugar can be added to the solution to improve palatability.

Tresaderm: This is an ear medication for dogs and cats that I have used for ear infections in cavies. This combination has an antibiotic, an antifungal, an anti-inflammatory steroid in it, and may be used with caution in pregnant sows. I usually don't see too much exudate from the ears, just a head tilt. I use 1 drop in each ear twice daily for 3-5 days, or until the tilt improves.

When to use antibiotics is often a judgement call.

A cough, sneeze, rattle or wet nose doesn't get me excited unless the animal is slightly lethargic, tapering off feed and/or drinking little. Soft stools aren't exciting unless the animal is gassy, crampy or very depressed. Crying during urination doesn't impress me unless it reoccurs or it is accompanied by lots of straining. I will sometimes treat for 1-2 days the cavy whose congested rattle has gone on for 34 days. A very sick pig with possible pneumonia will stay on SMZ-TMP if it is swallowing well, but gets switched to baytril if it is not. Pneumonia can often

have few respiratory signs, just showing depression and/or sudden death.

I have often had baby pigs up to 6 weeks of age that develop a gassy, crampy gut and diarrhea. If I can catch them at the depressed, no diarrhea stage I'll start them on simethicone drops (baby gas drops) and SMZ-TMP. Once they have diarrhea it is hard to turn them around - they become toxic very quickly. I often treat the littermates on a once daily basis for prevention.

If an animal is depressed, not eating/drinking and not pregnant, I will try force-feeding first to see if it responds. If no improvement after 24 hours I often start SMZ-TMP, hoping for a responsive infection. I keep sick pigs warm and quiet, sometimes on a heating pad set on low. I prefer to avoid any injections if possible, using oral antibiotics and force-feeding baby food and yogurt to supplement nutrition and fluids. This is one of the few times I'll use iceberg lettuce, specifically as a water source. I try to handle them as little as possible to decrease stress. I don't like to totally isolate them, but keep them within hearing distance of other cavies - they seem to do much better if they don't feel alone. With sick babies I

will often leave them with the family group as long as there are no bullies around. The fewer changes in their normal routine, the better these animals will fare.

Some of the antibiotics that should NEVER be used are streptomycin, penicillin, amoxicillin, clindamycin, cephalexin, lincomycin, erythromycin or any of their derivatives.

The action of these drugs affects the normal flora of the gut, causing a fatal and irreversible diarrhea. There is some thought that a few of these drugs cause a fatal allergic reaction. Any use of these drugs is always a bad choice, even when the alternative is no therapy at all. They always make the situation worse.

I hope I've answered some of your questions and have provided a reference for future treatments. Feel free to call me with your individual cases, advice is always free. Your experiences provide a greater base of knowledge for me to rely upon in answering the questions posed by others. If we all work together we can learn so much more.

** addendum per Dr. Blaes 7-6-00*

Except as specified below, no part of this publication may be reproduced in any form or by any means, including electronically, or transmitted by any means without permission in writing from the American Cavy Breeders Association (ACBA). Copying: Single copies of individual articles may be made for private use or research providing copies bear the ACBA copyright notice. Authorization does not extend to copies made or distributed for profit, commercial advantage, promotional purposes, to electronic storage or distribution, or to republication in any form. In all such cases, specific written permission from ACBA must be obtained. Permission for Other Use: Permission is granted for brief quotes with the customary acknowledgment of the source. To reprint a figure, table or other excerpt requires the consent of the ACBA. For permission contact: Lenore Gergen (ACBA Secretary), 16540 Hogan Avenue, Hastings, MN 55033. Opinions of individual authors are their own and do not necessarily reflect those of the ACBA, its board or officers.