

Over the Counter Medications for Birds

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Introduction

You think your favorite pet bird is sick. Your first thought is to run to the pet store to get some "medicine." After you get there you ask the clerk what to do and you are steered to a shelf with many "remedies" labeled for pet birds. You may wonder, what's the story with these store-bought "remedies"? Are any of them effective? Do they do anything at all or should you call a veterinarian?

In this brief article I will address these questions and also tell you how animal drugs are regulated by the Food and Drug Administration.

Background

All products considered to be "drugs" for man and animals are regulated by the Food and Drug Administration (FDA) under the Federal Food, Drug, and Cosmetic Act (FFDCA). This act and the accompanying regulations were placed into law in order to control the quality, safety and effectiveness of drugs used in man and animals and to try to put an end to the quackery and dangerous patent medicines that were rampant years ago. One of the FDA centers is the Center for Veterinary Medicine which is responsible for administering these laws that apply to animal drugs and devices. That responsibility includes not only drugs for pets but the huge market of drugs and medicated feed additives for food animals like cows and chickens.

According to the FFDCA, if a product is labeled to treat or prevent disease in any animal or man, then it is considered a drug. It must therefore be proven safe and effective for its purpose. That almost invariably means that the sponsor is required to obtain FDA approval to legally market the product in the U.S. For animal drugs, this takes the form of an approved NADA (New Animal Drug Application). The approved NADA requires the sponsor to supply significant evidence of the product's safety, efficacy, and manufacturing controls that assure purity, potency, stability, and consistency. In addition, the sponsor is required to continually monitor the product for manufacturing problems, adverse reactions, and other problems that might affect the product and report any such problems to the Agency.

What does this have to do with my pet bird?

It has everything to do with your pet bird. There are many products on the market that are labeled as drugs for treatment of disease pet birds. With only one or two rare exceptions, not readily available in pet stores, NONE of the products that are on the pet store shelves labeled for treating diseases of pet birds are approved by the FDA. The safety and effectiveness of these products for treatment of diseases in pet birds is unproven under the scientific standards used by the FDA. Unfortunately, such products have not traditionally received much regulatory attention, as opposed to drugs for food animals and traditional companion animals such as dogs and cats. Most of the FDA's resources are channeled into regulating the drugs for food animals to insure the safety of our food supply. This may change in the future, due to the proliferation of unapproved drugs for treating diseases of pet birds, fish, reptiles, hamsters and other small mammals, and the public health considerations these animals bring with them.

There is minimal, if any, scientific data that establishes that any of these products are safe or effective for their intended uses. In addition, unapproved products do not undergo the ongoing FDA monitoring of the manufacturing process. Unlike approved products, the public has no way of knowing if these products are being manufactured under appropriate standards or not. There is no oversight of these products such as is required of approved products. The firms that market these products defend them by stating that the products have been on the market for a long time. However, a successful marketing history alone does not establish that they are safe or effective. It establishes that the firms have successful marketing strategies.

It is the opinion of many expert avian veterinarians that most of these over-the-counter products do more harm than good. Wearing both of my hats as a practicing avian veterinarian and a veterinary medical officer at the FDA, I agree.

Birds are experts at hiding their symptoms of disease. This is a well established defense mechanism developed to insure their survival in the wild. They often do not appear ill until their disease state is advanced. Birds have a high metabolic rate and consequently require frequent influxes of energy (nutrients) to survive- think of the hummingbird. They usually have minimum body fat and thus have little energy reserve. So, if they get sick, they go downhill very rapidly. If you experiment with over-the-counter medicines, by the time you realize the bird is really in trouble and go seek a veterinarian, it might be too late to help your pet.

Traditionally, small animal veterinarians had been reluctant to treat pet birds because of the high mortality rate. Use of these medications can add significantly to this rate due to the loss of valuable time. Recent advances in avian medicine and surgery are changing these old preconceptions and the quality of care available today is much higher than twenty or even ten years ago. There is a considerable body of experience in the modern, well-trained avian veterinarian that can offer much to the pet bird. New knowledge, along with new instrumentation and surgical techniques, diagnostic methods and drugs have brought avian medicine a long way.

Let's discuss some specific examples, right from the pet store shelves:

Respiratory and "cold" remedies

The first and biggest problem with these products is, simply this: BIRDS DO NOT GET SIMPLE COLDS. A cold is defined in Cecil's Textbook of Medicine (a standard textbook on human diseases) as:

Although the term "common cold" does not denote a precisely defined disease, it has an almost universally comprehended meaning of an acute self limited common illness of all age groups, in which the major clinical manifestations involve the upper respiratory tract, which nasal discharge (coryza) or nasal obstruction as the predominant symptom.

The key phrase here is "self limited". Most colds in people get better in time without major complications and thus are not considered to be too serious. The use of the term "cold" on the labeling for a bird medicine implies a self-limiting disease that is not life-threatening. This is misleading as most respiratory diseases of birds are not colds at all but bacterial or chlamydial infections that can be quite serious if untreated. Allergic disease has also been implicated in some respiratory conditions. Regardless of the cause, most require veterinary attention, antibiotics where appropriate, and some can be life-threatening. Psittacosis, or chlamydiosis, also can present as a respiratory syndrome. This disease is transmissible to humans and symptomatic therapy dismissing the disease as a "cold" can have adverse consequences for the bird and it's owner too. Some respiratory remedies may help clear passages and provide some relief but only if used in addition to real treatment and not by themselves.

Diarrhea treatments

You will find many products labeled to treat "diarrhea" in pet birds. Most of them are based on a kaolin-pectin combination, similar to those sold for use in humans. There are several problems with this. First, diarrhea in pet birds is rarely the self-limiting, uncomplicated condition that it is frequently in humans. True diarrhea (other than transitory changes in bird's stools due to certain fresh foods) or changes in the droppings, is actually considered rare in pet birds and is a symptom of a systemic illness. Second, it is common for a pet owner to observe excess liquid in the droppings and call this "diarrhea." Most of the time the problem is actually a condition called "polyuria", which is an over-production of urine and urates from the kidneys. This is easily confused by an inexperienced bird owner. Polyuria is much more common and also is usually a symptom of an underlying disease. In EITHER diarrhea or polyuria, a symptomatic remedy for "diarrhea" is usually ineffective. This is because:

1] True diarrhea is usually indicative of an underlying disease that requires more than symptomatic treatment, and

2] If the bird really has polyuria, which is kidney-related and also has many possible underlying causes, then obviously treating the gastrointestinal tract symptomatically

alone makes no rational sense. Appropriate diagnosis and treatment by a veterinarian are usually required.

Antibiotics

Over-the-counter antibiotics are available at most pet stores for fish and birds. These (with a couple of lesser known exceptions) are also not approved by FDA and are manufactured to unknown standards of quality. Most are intended for use in the drinking water and can include the tetracyclines and erythromycin. There are many reasons why using these products on your pet are not indicated and may be detrimental. Following are just a few:

- 1] If a bird is sick it usually does not drink much water. So, putting drugs in the drinking water does not really assure that the bird is taking up any drug at all.
- 2] Some antibiotics placed in drinking water break down very quickly and become less effective. In addition, many birds object to the bitter taste and will not drink treated water at all, which could lead to dehydration and further debilitation.
- 3] The antibiotics commonly sold in pet stores are not effective against many of the common bacterial infections in pet birds.
- 4] Even at low levels, these antibiotics can kill normal bacteria living in the bird's gastrointestinal tract, thus further weakening it and making it susceptible to yeast or fungal infections, etc.
- 5] If you use these products first and THEN seek a veterinarian's help, it makes it harder to diagnose the disease as even low-level antibiotics can adversely affect diagnostic tests such as cultures. In addition you have wasted valuable time.
- 6] Indiscriminate use of low-level antibiotics can result in development of resistant bacterial strains and "superinfections" that are difficult to treat. This is also well-recognized in other species including man.

The rationale behind using these drugs in the water under these conditions does not stand up to scientific scrutiny and points to their being more detrimental than helpful.

Conclusion

Your bird is important to you, line up a qualified avian veterinarian before you need one. Pet store personnel, although they have good intentions, are not trained in veterinary medicine and should not be dispensing medical advice except to refer you to a professional. Avian medicine has come a long way in the past 10 years. There are now

a small number of "board-certified" avian specialists in the U.S., with numbers growing yearly. Equally important, organizations like the Association of Avian Veterinarians (AAV) and other regional associations have very been active in educating veterinarians in all aspects of avian medicine and surgery. Diagnostic laboratories that are adept at working with the small amounts of blood and other samples drawn from birds are available. Avian medicine is still a young science, but it has come a long way.

Do not think that the over-the-counter drugs or "remedies" will save your bird's life in a crisis. This is false hope. They may be detrimental to your bird's health and waste valuable time. Don't wait until it is too late to find this out.

References:

JB Wyngaarden and Lloyd H. Smith, editors, Cecil Textbook of Medicine, 17th Edition, W.B. Saunders & Company, Philadelphia, 1985.

BW Ritchie, GJ Harrison, and LR Harrison, eds, Avian Medicine: Principles and Application. Wingers Publishing, Lake Worth, 1994

Federal Food, Drug, and Cosmetic Act