

# Overview on Zinc Poisoning

## by Dr Greg Burkett

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One of the hottest topics in avian medicine and in aviculture in the last few years has been zinc toxicosis. Heavy metal poisonings have long been seen as a problem in veterinary medicine. The most common type is lead poisoning. In recent years, however, diagnosis of zinc toxicosis has been on the rise.

**What Causes Zinc Toxicosis?** This is primarily an environmental problem. Several different etiologies have been determined for zinc poisoning. One of the first causes described by veterinarians was termed "New Cage Syndrome". Veterinarians recognized that some birds would exhibit symptoms resembling heavy metal toxicity soon after being placed in new, galvanized wire cages. Zinc is one of the main elements found in galvanized coatings. Birds will lick the wire or accidentally ingest zinc when using their beak to climb the cage wire. Other potential sources of zinc include: ¥ Bolts, nuts, screws, quick links, and other hardware. ¥ Chains and other metals. ¥ Some paints will contain zinc. ¥ Keys

Manufacturers have become more aware of this problem and are now offering safe alternatives such as stainless steel chain and quick links. You may want to contact the manufacturer to determine the zinc content in questionable sources. California Cage Company and For The Birds acrylic toys are two companies that provide a written guarantee on zinc-free products. You can also replace the quick links on toys with stainless steel quick links. The pear shaped links on smaller bird toys are nickel plated and do not pose a hazard. Generally, a shiny, polished finish on metals will be safe and zinc-free.

Researchers, avian veterinarians, aviculturists, and pet bird owners are

working together to gather information that will be useful in the prevention and treatment of zinc toxicosis. Zinc toxicosis has been a major topic at the Association of Avian Veterinarians Annual Conference for the last three years in an effort to keep avian veterinarians trained and informed about this potentially fatal problem.

Zinc toxicosis can present as a diagnostic challenge. Veterinarians rely heavily on the historical information that owners provide. Clinical signs will vary slightly with each case. Symptoms to be aware of include weakness, depression, polyuria, polydypsia, diarrhea, weight loss, hematuria, and seizures. If you suspect that your bird has ingested a toxin, or if your bird exhibits any of these symptoms you must call your avian veterinarian immediately for recommendations and instructions.

Diagnosis and Treatment Assays are available to measure the level of zinc in the blood stream. An elevated level of zinc is diagnostic for zinc toxicosis. Oral medications developed for lead poisoning in children has been clinically effective in treating zinc intoxication. Treatment is rewarding because recovery is often rapid and dramatic.

Removing the zinc from the bird is the first life saving step when treating for zinc toxicosis. However, you must take steps to correct the environment to prevent further exposure.

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