

Lead Poisoning in Birds

Household dangers

Heavy metal poisonings in birds most commonly occurs from ingestion of substances containing lead. Lead may be found in many household items (Box 1), and the companion parrot is at risk because of its curious nature and an innate desire to chew.

Box 1. Possible sources of lead

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| <ul style="list-style-type: none">• Leaded paint (particularly in older homes)• Antique or imported metal cages• Plaster and caulking compounds, roofing materials• Batteries• Solder• Curtain weights | <ul style="list-style-type: none">• Fishing weights, jig heads• Shotgun pellets• Stained glass• Chandeliers• Foil from champagne bottles• Linoleum• Improperly glazed ceramic• Golf balls |
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When lead is ingested...

When lead is ingested, small amounts are absorbed from the gastrointestinal tract and released into the bloodstream. Lead is then taken up by soft tissues and eventually by bone. This means that lead poisoning is a "deep seated" problem. The bone retains heavy metal and leaches the toxin out gradually over time.

What are the signs of lead poisoning?

Lead affects all major organs and can cause damage to the gastrointestinal tract, red blood cells, kidneys and liver. Clinical signs may include weakness or depressor, a poor appetite, delayed crop emptying, vomiting or regurgitation, abnormal droppings, and even neurological signs such as twitching, circling, convulsions and/or blindness.

Diagnosis of lead poisoning

Treatment of lead toxicity is quite specific, and testing must first be performed to confirm a diagnosis. Your veterinarian will want to perform blood work including blood lead levels. X-rays are also recommended since some, but not all cases of lead toxicosis will reveal the presence of metal within the gastrointestinal tract. |

How is lead toxicosis managed?

The cornerstone of treatment relies on binding and removing heavy metal from the bird's tissues. This process is called chelation therapy. Depending on your bird's condition, your veterinarian will have a variety of agents to choose from however calcium EDTA (Ca EDTA) is a popular chelation agent. Because absorbed lead leaches from bone over time, chelation therapy is often administered in pulses over an extended period. For instance Ca EDTA injections may be given for a 3-5 day periods with break periods in between of 3-5 days.

If a source of heavy metal is seen on x-rays, your veterinarian may also recommend a procedure or treatment to directly remove the lead from the stomach.

An ounce of prevention

Know what household items may contain lead (*see Box 1 above*). Remove all known sources of heavy metal or limit exposure to areas with heavy metals when removal is impossible. Always supervise pet birds during time outside of the cage, and prevent your bird from chewing and ingesting undesirable objects.

Protect wildlife from lead poisoning too!

Important sources of lead for wild birds include fishing weights and shotgun pellets. Fortunately non-toxic steel or bismuth shot is now required in the United States for waterfowl hunting. This switch from lead to non-toxic shot has reduced the number of birds dying from lead poisoning in America. The United States and Canada are also considering a ban on lead fishing sinkers.

References

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