

the Vet's Corner

Necropsy (Autopsy) in Avian Medicine

by
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The death of a bird is, needless to say, a most disconcerting experience for a pet owner or aviculturist. Sometimes the death is anticipated, but most of the time it is not. Acute (sudden) deaths occur from time to time, even in the best of aviaries. As discussed in previous articles, the avian tendency to mask disease symptoms can "hide" an illness until the bird unexpectedly passes away.

In avian practice, the veterinarian is sometimes placed in the role of a detective in investigating disease outbreaks. Often, when examining a sick patient, it is learned that a previous bird (or birds) had died (usually suddenly). In most cases, the deceased bird(s) is not presented for post-mortem examination but is casually discarded. It is this practice that we would like to discourage because there is so much that the bird owner and avian veterinarian can learn by examining the bird(s) after death.

There are many reasons why a necropsy is desirable if a death has occurred. Some of the most important reasons are listed below:

1) A dead bird may serve as a "sentinel" for the group. By discovering exactly what killed a member of the flock, the other members can be properly medicated to avert further losses.

2) The deceased bird can be used to monitor the health status of the group. For instance, the necropsy may reveal that roundworms, tapeworms, or other parasites are present in the flock.

3) A necropsy may reveal a non-contagious condition (such as Egg-yolk Peritonitis or an injury) and reassure the aviculturist that an epidemic is not impending.

4) If the bird has been previously treated, the veterinarian can determine exactly why the treatment program failed. Was there an undiagnosed organism present? Were the internal organs

damaged beyond repair? Did the bird have an "untreatable" disease such as cancer? Did internal bleeding occur from a clotting defect?, etc.

5) A necropsy may provide clues regarding how long a bird has been sick. This is often important information in legal cases to determine if the seller is responsible or not for having sold a sick bird.

6) New diseases can be studied and reported. For instance, Macaw Wasting Syndrome could not have been discovered and studied if necropsies had not been performed.

The list of reasons for performing necropsies is lengthy. The aforementioned are the most important.

There are many reasons for *not* performing necropsies in the minds of pet owners and aviculturists. A few of these are listed below:

1) A pet owner may be reluctant to have his or her pet dissected. The veterinarian is faced daily with the emotions that pet owners generate and the extreme attachments that develop between humans and pets. The owner should be reassured that the dead animal will not be "torn apart," but rather that a few small tissue samples will be carefully removed. This will help benefit avian medicine in general. The veterinarian will continue to learn, and the information generated may protect the next bird the owner acquires. A cosmetic necropsy can be performed if the owner wants the body following the examination. We feel strongly that if an animal must die, we must be sure we know why and learn from it. To not do so makes the bird's fight to live meaningless. To learn something about why an animal dies always helps the living in some way and assures that the bird did not "die in vain." Of course, we do not force the issue if an owner does not wish a necropsy to be performed. Tact and compassion for the owner's feelings are of paramount importance to us as veterinarians and human beings.

2) Some people fear that a reportable disease will be discovered. Many importers throw dead birds away rather than be quarantined for Newcastle's Disease, Psittacosis, etc.

3) Likewise, others fear that an incriminating, but not reportable disease, will be discovered (such as Papovavirus). A reputable veterinarian would never divulge privileged information of this kind. The aviculturist can only suffer more losses by ignoring the underlying reasons and causes for his losses. Ignorance can never lead to bliss when one ignores the death of a single bird or

multiple birds that were part of a group (private collection, breeding colony, etc.).

4) Some people simply don't care or are too lazy to have necropsies performed. These people have no business owning birds but are often the most upset when losses occur.

5) Others feel that having necropsies done is "too expensive." Most County laboratories and avian veterinarians will perform necropsies for reasonable fees. To not find out why a bird died because "it's too expensive" usually becomes much more expensive in the long run as the losses mount.

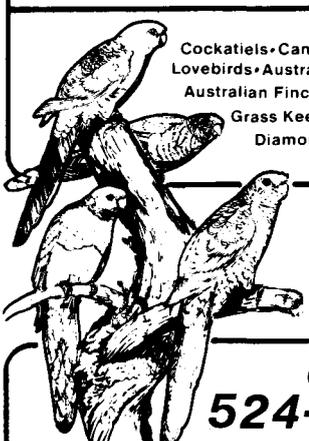
6) Another excuse is that "little is determined by a necropsy." This is absolute nonsense. An occasional necropsy may not be as helpful as anticipated, but these cases are unusual, especially as more becomes learned about avian diseases. Sometimes, a post-mortem examination will raise more questions than answers. These questions, however, soon become the foundation of medical inquiry and research.

There are, of course, many other reasons for "not performing" necropsies. It is hoped that the reader can now see how important the necropsy is to proper medical diagnosis, management, and treatment of avian diseases.

Submission of Dead Birds For Necropsy

If a death has occurred, it is imperative that the veterinarian or laboratory examine the body *as soon as possible*. Decomposition (autolysis) takes place rapidly in birds because the heavy insulation (feathers, etc.) tends to keep the body temperature high, even

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**Wisconsin Cage Bird Club, Inc.
7th Annual Cage Bird Show and
ABS District 4 Regional Show
August 17, 18, 1984**

Howard Johnson Motor Lodge
DePere, Wisconsin

Judges:

Budgies — Russ Roberts
Hookbills — Bob Zeigler
Exotics — Bob Wild

Contact: Rick Brickman, show sec.
505 McKinley Ave., Omro, WI 54963
(414) 695-2242

**Blue Chip Exhibition
Budgerigar Society
1984 District Regional Show
August 18th, 1984**

Cincinnati, Ohio

Judges:

Dan Gallo, Worcester, Mass.
Eric Peake, England

Contact: Bob Wilson, Show Manager
7735 Devonwood Dr.,
West Chester, OH 45069
(513) 777-4531

**American Pheasant and Waterfowl Society
and**

**International Wild Waterfowl Association
1984 Convention**

September 5, 6, 7, 8, 1984

Sheraton Mansfield Conference Center
Mansfield, Mass.

Contact: Ed Diffendale, Chairman
196 Mansfield Ave., (Rt. 140)
Norton, Mass. 02766
(617) 285-6535

**Cascade Budgerigar Society
3rd Annual Budgerigar Show
September 14, 15, 16, 1984**

V.F.W. Hall, S.E. Mill
Portland, Oregon

Contact: Roy Krause, chairman
(503) 641-4457

**Virginia Ornamental Bird Society
2nd All Bird Show
September 29th, 1984**

Holiday Inn — Airport
Roanoke, Virginia

Judges:

English Budgies — Crawford Maddux
Canaries & Amer. Budgies —
Bonnie Williams
Cockatiels & Hookbills —
Harold Bowles

Contact: E. Wayne Tomlinson
2518 Avalon Ave., N.W.,
Roanoke, VA 24012
(703) 362-8228

**Ohio Valley Cage Bird Club
Annual All Bird Show
October 5, 6, 7, 1984**

Contact: Cindy Mullens
9218 Sunderland Dr.,
Westchester, OH 45069

**Central Pennsylvania Cage Bird Club
2nd Annual Show
October 5, 6, 7, 1984**

at the Holiday Inn Town
Harrisburg, PA

For information contact:
Sharlene R. Byrem, secretary
133-B Community St.
RD #1 Wellsville, PA 17365

**Sunshine State
Cage Bird Society, Inc.
All Type Bird Show
October 13th, 1984**

Howard Johnson, Orlando, FL 32763
603 Lee Rd. (corner Lee Rd. & I 4)

Judges:

Red factor & Type — Allen Gibson,
Tampa, FL
Amer. Singers — Marilyn Simmons,
West Minster, MA
Finches — Richard Schmidt, Lutz, FL
Exotics — Richard Clarkson,
Brandon, FL
Budgies — Joseph Sobella,
Ridgewood, NJ
Cockatiels — Dee Dee Squyres,
Fort Worth, TX

Contact: Steve Silver, Show Chairman
115 Dogwood Ave.,
Orange City, FL 32763

**Baltimore Bird Fanciers
Annual Bird Show
October 19, 20, 1984**

Elks Lodge, E. Homberg Ave., Esses, MD

Judges:

Type & Hartz Canaries — Ken Houle
Color Canaries — Raul Perez
Singers — Hank Mahnken
Cockatiels & Exotics — Dick Sharp
Contact: Alvina Frey, Sec.
12120 Boxer Hill Rd.,
Cockeysville, MD 21030

**Gulf South Bird Club
6th Annual All Bird Show
October 19, 20, 1984**

at the New Orleans Airport Hilton
901 Airline Highway
Kenner, LA
(504) 469-5000

For information contact:
E.J. Nagel, Jr., 1930 20th St.
Kenner, LA 70062
(504) 469-2435

**Carolina Cage Bird Club
7th Annual All Cage Bird Show
October 20th, 1984**

Sheraton International Hotel
Spartanburg, South Carolina
Contact: Alvin L. Hudson
417 Stokes Rd., Simpsonville, SC 29681
(803) 967-8996

**Fresno Canary and Finch Club
21st Annual Bird Show
October 26, 27, 28, 1984**

Hacienda Inn, Fresno, CA
Clenton Ave. and Hwy. 99

Judges:

Colorbred — Joe Gordon,
Santa Clara, CA
Type — Mark Whitker, MO
Finch — Ed Gesck, Modesto, CA
Hookbills — Joe Krader,
Yorba Linda, CA
Eng. Budgies — John deVictoria,
Cupertino, CA
No ship-ins

Contact: Hazel Espindula
1633 W. Zumwalt, Tulare, CA 93274

**Motor City Bird Breeders
Annual Bird Show
October 27, 28, 1984**

at St. Stephen's Hall
Detroit, Michigan

Judges:

Type I — Bernard deVaney
Type II — Robert Morrison
American Singers — Hank Mahnken
Red/New Color — Otto Mahnke
Budgies — Russ Roberts
Foreign — Charles Anchor
For info. contact:
Kathy Frank, 19400 MacArthur
Redford, Michigan 48240
(313) 538-6598

**Cleveland Canary & Cage Club
Annual All Bird Exhibition
November 4th, 1984**

German Central Lodge
7863 York Rd., Parma, OH
Contact: Ray Ptak, Corr. Sec.
7102 Wilber Ave., Parma, OH 44129

**Santa Clara Valley
Canary and Exotic Bird Club
23rd Annual Bird Show
November 23, 24, 25, 1984**

Peterson Jr. High School
El Camino & Ham St., Sunnyvale, CA

Judges:

Red factor — Charles Hudson
Type — Davis Guinn
Domestic — Joe Gordon
Exotic hookbills & finches —
Dale Thompson
Budgies — John "Vic" deVictoria
For info. contact:
Delilah Quieto
1952 Beech St., Santa Clara, CA 95054
(408) 988-1900

after death. Dead birds should be presented immediately or cooled rapidly (immersing the body in ice water for about 30 minutes is helpful) and refrigerated. Freezing distorts intracellular structure and is discouraged by pathologists but may be necessary if the body cannot be examined within a short period of time after death (48 hours).

The Necropsy

A thorough necropsy consists of a careful examination of the tissues grossly (by visual inspection) and then microscopically. Except for a few visually obvious conditions, most avian diagnoses must be made by microscopic examination of the tissues. A bird that has died of shock grossly looks the same as a bird that has died from an acute (rapidly acting) infection, etc. Most veterinarians will grossly examine the body and then submit tissue sections to a County or State laboratory for microscopic analysis. Furthermore, samples are usually taken for microbiological (bacteria, virus, fungi, etc.) and cytological (to study the cells of specific tissues) analyses at the time of necropsy. To grossly look at the body and conclude "nothing was abnormal" is meaningless without a more in-depth analysis of the tissues, body fluids, etc.

It is hoped that the reader now has a better understanding of why necropsies are important in avian medicine. It is always an unhappy situation when a bird dies. The death is painful for the bird's owner because it often represents the loss of a wonderful and joyful companion, or a valuable breeder, or it represents some other loss. The death is painful, too, for the veterinarian, because it represents personal failure. The performance of an autopsy and the results it provides, however, can be of great value to both parties. The owner of the deceased bird benefits from gaining a better understanding of why his bird died and from determining whether or not other birds in the household or aviary are at any risk. The veterinarian is given the opportunity to further his own education. Both parties benefit because they are contributing to the advancement of avian medicine and aviculture in which they both have an investment.

The goal of both the bird owner and the veterinarian is to promote and maintain optimum health of all captive birds and prevent their demise, if at all possible. The post mortem examination provides yet another means with which this goal can be achieved. ●



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