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Chapter 8: Managing sick and injured vulture admissions

In 1 collection

Kerri Wolter¹

¹VulPro

1 Works for me This protocol is published without a DOI.

VulPro

Kerri Wolter

ABSTRACT

This protocol provides guidelines for managing sick and injured vulture admissions.

ATTACHMENTS

Vulture_Rehabilitation_Manual_Version_2.0_.pdf

PROTOCOL CITATION

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COLLECTIONS (i)

Vulture Rehabilitation Manual

KEYWORDS

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GUIDELINES



It is vital to bear in mind that more birds will be saved by appropriate fluid and nutritional support than any single medical or surgical therapy.

Patients should at least be maintaining weight, if not gaining weight. Feeding regimes must be adjusted to account for any shortfalls. This may warrant increasing the frequency or volume of supplementary feeding. Further weight loss, despite efforts, suggests compromised health.

Infection control and biosecurity

A sick vulture can be carrying and excreting a range of infectious pathogens. A sick bird can be a reservoir for a variety of infections and could be a risk to young, old and immune-compromised vultures. Contamination of rehabilitation facilities can result in infection of other patients and staff working in the facility. It is worth noting that if a bird is shedding very high levels of a pathogen, the risk of bacterial, viral, fungal and parasitic infections need to be considered.

Veterinary input will be required in order to consider if a bird is suffering from a systemic (i.e. blood born within the body systems) infection. Verification is generally achieved by testing a blood sample. Published normal ranges for white blood cell (WBC) counts for a variety of African vulture species are given in the table below. White cell counts below the lower limit of the normal range tend to indicate a viral infection, whilst WBC counts above the upper limit of the normal range tend to indicate a fungal or bacterial infection (although lead poisoning will also cause an elevated level). Gut infections that do not pass into the body tend not to cause elevations of white blood cell levels.

No vulture that is considered to be suffering from an infection at admission should be released until one can be reasonably certain that the infection is fully controlled.

Record keeping

All birds admitted must be identifiable and good records maintained. Records should detail:

- reason for admission/cause of injury
- origin of where the bird came from
- clinical presentation and demeanour
- · weight and body condition on admission and at subsequent checks
- all medications administered, tests conducted, food and fluid administered
- response to therapy

Accommodation

The following pre-requisites are essential:

- Easy to clean and disinfect
- Quiet, dimly lit (when required), in a stress-free environment
- Easy access for observation, either direct or by CCTV
- Must be easy to restrain and remove the patient from the box and replace it, with minimal risk of injury and minimal stress to patient and staff
- Isolation facilities for accommodating potentially infectious patients is important
- · Weighing scales are essential

If birds are in sternal recumbency, but still able to keep their head elevated, then pressure sores on legs and keel are prevented by creating a towel donut. In birds with paralysed legs, facilities to sling the bird is essential. If the bird is in sternal recumbency and is unable to hold its head up, then a cushion or foam block must be placed in front of the bird's neck, with the head maintained on this raised surface. In this way the head is always kept above the level of the crop, so there is no risk of crop fluid reflux to the mouth and entrance into the wind pipe, which would result in aspiration and fatal pneumonia.

Once no longer in a critical condition, it is beneficial to house birds where they have access to sunshine, grass and other vultures

Species	White blood cell (WBC) count reference interval x10 ³ cells/uL	WBC count mean x10 ³ cells/uL	Sample size (n)	Hematocrit (HCT) reference interval %	HCT mean	Sample size (n)
Cape vulture Gyps coprotheres	3.4 - 22.9 ²	11.3	96	37.1 - 56.9	45.2	81
African White- backed vulture Gyps africanus	13.45 - 19.97 ³	16.71	21	42 - 58	50	21
	5.5 - 36.9 ²	16.25	83	34.2 - 53.5	43.1	92
Ruppell's griffon vulture <i>Gyps rueppelli</i>	6.02 - 49.872	21.54	388	31 - 53	43.8	304
Griffon vulture Gyps fulvus	8.0 - 29.9 ² 4.41 - 19.93 ⁴	16.26 12.17	41 51	32.5 - 50.8 36.7 - 50.3	42.0 43.5	47 51
Bearded vulture Gypaetus barbatus	7.06 - 15.42 ⁵	10.17	26	41 - 54.2	47.1	26
Cinereous vulture Aegypius monachus	5.05 - 37.1 ² 14.74 - 24.14 ⁶	16.92 19.26	329 31	32 - 49 37 - 46	41.2 43	215 31
Hooded vulture Necrosyrtes monachus	5.69 - 39.29 ²	18.46	142	27.6 - 52.5	40.6	105
Lappet-faced vulture Torgos tracheliotos	5.79 - 38.70 ²	19.01	211	34 - 50	43.2	161

ZIMS Expected Test Results for Gyps genus, Aegypius monachus, Necrosyrtes monachus, and Torgos tracheliotos.