

Nursing Management of Rabbit and Parrot Emergencies

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Introduction

Some of the most common patients currently seen in exotic pet practice include parrots and rabbits. Among these species, there are some trends in what constitutes a real emergency. Technicians are often the first ones evaluating these cases, and they should be prepared to not only identify what the emergency is, but be able to communicate the urgency to the client and doctor. Technicians should be able to prepare possible therapies and treatments, handle fragile animals properly, and anticipate the needs of both the doctor and the patient. Understanding what may be causing the emergency is vital to being able to achieve these nursing skills.

Identifying a True Emergency

While clients may be confused and scared about their pets condition, some of the key indicators that these pets should be seen right away include: trauma, bleeding, respiratory distress, anorexia, seizures, or reproductive distress. When these patients arrive, technicians should be cautious. There is hardly ever an instance where one of these animals should be rushed to a treatment room with traditional emergency care initiated, such as IV catheter placement, blood pressure assessment, CPR, etc. As prey species, they need to be treated differently than a dog, cat, or ferret to prevent a stress response that can result in death. Technicians should be calm, gentle, and quickly assess the history to identify the nature of emergency, often not touching the animal until they have a general idea of what is wrong and can get the animal to a quiet place where heat and oxygen are available.

PARROTS

Respiratory distress

Triage and history are crucial to determine the possible cause of distress. In birds, difficulty breathing can be caused by several factors including upper or lower airway disease caused by fungal or bacterial infection, space occupying masses such as reproductive cysts/cancers/eggs or liver enlargement, inhalant toxicities such as PTFE (non-stick cookware), air fresheners, or smoke, aspiration, or heart disease. Obtaining a simple and fast history from clients often reveals the potential cause, or at least rules out obvious non-factors. For example, if it is a young, male bird that was just purchased from a pet store, the chances are the respiratory distress is not originating from reproductive disease or a primary coelomic mass and more likely something infectious or environmental.

Sometimes handling alone of these panicked patients can cause death. These birds should be placed in a warm (80-85 degree f) enclosure with humidified 50% oxygen. Some birds may not respond to oxygen, which could indicate a tracheal obstruction requiring an air-sac canula be placed. Others will noticeably calm down, potentially allowing for a limited exam, SPO2 monitoring, weight, supportive care needs, and diagnostics.

Trauma

A traumatic injury can cause many symptoms and it can be tempting to attempt to address the tissue wound as the first priority. However, unless the bird is actively hemorrhaging, stabilizing the patient must be the primary intent. Some common accidents that happen to birds in captivity include flying into mirrors/windows/ceiling fans/hot water, bites or scratches from other animals including other birds, being stepped on or crushed in a door. Technicians should try to obtain information such as when the accident happened, if the owner tried any "first-aid" at home, and if there are any concurrent medical conditions the owner knows of. Sometimes owners think the bird hit a window and that caused it to collapse to the ground, but a thorough history may show that the bird had been acting strange for several days and hitting the window was secondary to weakness.

If the patient is not bleeding, technicians should prepare an enclosure that is safe and comfortable for an injured bird. Consider a dark padded enclosure, low or no perches, a variety of easily attainable food items, and heat support. Analgesics should be a primary consideration as well as the potential to treat for

shock if required. Analgesics could include butorphanol, meloxicam, lidocaine, gabapentin, or LLLT (low level laser therapy). A prepared technician will be ready for obtaining radiographs, cleaning wounds, giving fluids, splinting/bandaging, and persistent monitoring of behavior to address changes as they occur. General anesthesia may be required for many of the repairs needed in traumatic cases, and technicians should have all equipment ready to use.

Bleeding

There are many causes of bleeding in birds, and while not all are traumatic, all should be treated immediately. Some common causes for bleeding in pet birds are broken blood feathers, chipped beak tips, at-home-nail-trims, wounds (self-inflicted or other), trauma, or from the vent which can include lead poisoning (hematuria/hematochezia), reproductive, or papillomatosis.

Unlike other emergencies, bleeding should be addressed quickly, especially if originating from obvious tissue instead. Often owners know what caused the bleeding such as in the case of trauma. If the bleeding is in the droppings, owners should be asked about the potential for chewing on lead items such as old painted windowsills or furniture, antiques, stained glass, old bells, zippers, or jewelry.

Technicians should be prepared with appropriate methods for cautery. This could include applying manual pressure, or preparing electrocautery/penlight, quick stop, or other hemostatic agents. They should be ready to clean wounds, administer prescribed analgesics, antibiotics, and supportive care. Technicians can also be instrumental in helping owners prevent future incidents by educating them about safety for birds in the home. They should take the time to investigate and come up with a plan that the owner can put into effect to avoid further accidents.

Anorexia

Anorexia is an emergency for birds, particularly if it has been going on for more than a few days. These patients require technicians to triage by obtaining more of a history than with some of the other emergency presentations. Information such as age, last time witnessed eating, what food is offered, quality of droppings, other bird or pets in home, and other signs of illness should all be obtained. Some of these birds may present severely weak and unable to perch, others may have fluffed feathers and looked depressed. If the bird is not dyspneic and allows gentle handling, technicians should assess baseline parameters such as a BCS, HR/RR, weight, and hydration status.

Almost anything can cause anorexia in birds. Etiology could be infectious, metabolic, environmental, or neoplastic. Therefore, diagnostics will be mandatory. Technicians will be required to have exceptional skills to gently assist with restraint, phlebotomy, sedation, and radiology. Nursing care of these birds will include creating a comfortable enclosure with padding, heat and humidity support, a variety of favorite foods, and limited low perches. Technical skills may also include placing IV or IO catheters, administering fluids, gavage feeding, and diligent patient monitoring.

Reproductive

Female birds may present on emergency in a variety of reproductive emergencies. They may appear to be in respiratory distress, or be bleeding, or have a prolapse, or even a combination of these problems. Sometimes clients may not even know the gender of their bird, or they may not understand that a parrot living alone could lay eggs. When triaging these birds, technicians need to obtain the vital history needed to determine if reproductive disease may be causing the problem the bird is having.

Often, these birds will have an egg distal enough in the oviduct to be able to be palpated in the coelom. If the bird is not stable for anesthesia or sedation, taking a radiograph of a bird either with a lateral beam or DV while standing can help give information about egg size and placement. These birds need to be set up in a warm, humid environment that is quiet, dark, and comfortable. Often vets may prescribe vitamin D3, calcium, vent lubrication, analgesics, and fluids to help support the bird to potentially lay the egg without assistance.

RABBITS

Anorexia/GI Stasis

When rabbits don't eat, even if only for 12 hours, profound changes can occur in their gastrointestinal tract that warrant an emergency visit to the vet. Technicians should be specific during the triage to determine age, gender, usual diet including quantities and specifics about what makes up the pellets, defecation, other pets in the home, spay/neuter status, history of stasis or other illness, and chewing habits in the home. Most of these rabbits are stable enough to obtain vital signs: TPR, abdominal palpation, pain score, and dental assessment. Rabbits who are hypothermic (under 100degrees f) should be treated with slow warming quickly. A tense, bloated abdomen is indicative of painful gas and veterinarians should be alerted to the likelihood of pain. Dental abnormalities, including the cheek teeth, should be described. This information can be easily taken by a technician in a 5 minute triage and will help the veterinarian pinpoint their diagnostic and treatment plan.

There are many potential causes for anorexia in rabbits. Pain, parasites (external, intestinal, or in the blood), poor diet, concurrent illness (reproductive, dental, urinary, or respiratory disease), primary dehydration, trauma, age/arthritis, or lead poisoning/toxicity are all common etiologies. Until the instigating cause is determined, technicians need to be proactive in their nursing care. Some important considerations when rabbits aren't eating are to prevent ileus and gut stasis. This can be through encouraging exercise or administering prescribed prokinetics. Preventing or treating pain is vital if there is gas building, and rehydrating the rabbit with crystalloids is usually an initial step. A rabbit's temperature should be between 100° and 103° f, and technicians should manage hyper or hypothermia. Setting these rabbits up in an enclosure that is quiet, appropriately temperature controlled, not too bright, soft, and maybe with a hiding spot are important parts of keeping the rabbit calm. When these primary concerns are addressed, it may be safe to begin the diagnostic work-up.

Seizures/Neurologic Disease

When triaging these rabbits, technicians should determine if the pet is "stable": can it stand or is it spinning uncontrollably or obtunded. Immediate questions for the owner should include the duration of the symptoms, if there is a history of possible toxin exposure such as eating paint or use of parasite control at home, age of the rabbit, whether or not the pet has been able to eat, and if there are other rabbits or pets in the home. Technicians should take a TPR (temperature, pulse rate, and respiration rate), look for signs of trauma, and evaluate the ears.

Causes of neurologic emergencies in rabbits include *Encephalitozoon cuniculi*, a microsporidial parasite classified in the kingdom Fungi that can damage brain tissue causing severe vestibular disease and seizures. A severe ear mite infestation or ear infection can cause similar symptoms as well as torticollis and spinning. Toxicities such as the use of Fipronil (Frontline™) or lead poisoning can also present with neurologic signs. Other potential causes include spinal trauma, brain tumors, or stroke.

In an emergency situation while waiting for diagnostics, these rabbits should be cared for by treating the symptoms. Hospital caging should be padded well and free from things that may cause stress or trauma such as leaving hay with a spinning rabbit that may cause corneal ulcers. These rabbits are at high risk for developing gastro-intestinal stasis if they don't eat and become dehydrated. Technicians need to support them with fluids, orally and parenterally, prokinetics, assistance feeding a variety of high fiber palatable foods, analgesics when warranted, and potentially anti-vertigo drugs such as meclizine.

Respiratory

Because rabbits are obligate nasal breathers, respiratory distress is a real emergency. If at triage, technicians see a rabbit breathing through the mouth, putting it in a quiet, calm, darkened enclosure with oxygen may be immediately warranted. Technicians should look to see if there is nasal discharge, as well as sticky matting on the front paws from wiping the nose. Questions about appetite, defecation, and duration of distress are all important to gather. If the rabbit is stable, checking for a TPR and assessing the color of the mucus membranes will be helpful.

As well as providing supplemental oxygen, cleaning the nose is important, although care should be taken as rabbits generally become very stressed when people clean or touch their noses. Stress while having

trouble breathing can easily cause respiratory arrest in rabbits, so any diagnostics should be taken with extreme slow, gentle care. Do not keep these rabbits near loud animals or other noises.

Heatstroke

Rabbits do not sweat or pant, making them highly susceptible to heat related fatalities. Signs of heat stroke include red ears, open-mouth breathing, nostril flaring, salivating, recumbency, and convulsing. The history may be the most important part of the triage for these rabbits. Owner should be questioned about the environment at home. If the rabbit was kept in an area that was over 80° f without fresh, circulating air or a cooling stone, heatstroke should be suspected. Also a lack of a water source, lack of shade, and an unkempt hair coat may be clues. If all of these signs and historical details are evident, and the temperature is over 104° f, the rabbit most likely is suffering from heat stroke.

Like with other species, cooling should be immediate, but not shocking. Cool wet towels applied to the body, subcutaneous or intravenous fluids at room temperature, applying alcohol to the ear pinna, and syringe feeding cool water (if swallowing) are all techniques technicians can use.

Technicians should also be sure to check for fly strike in these patients, as it is common in hot weather for rabbits to succumb to myiasis or maggots infesting a wound. This can be terribly painful and create tremendous stress for rabbits. Technicians should be diligent in examining the scrotal region and vaginal folds as well as the ears and dewlap.

Trauma

Rabbits that present with trauma could be completely stable, or in shock. Technicians should gather information about the nature and timing of the trauma from the client. The history should include any known changes in appetite or defecation, and technicians should obtain a TPR, blood pressure, as well as evaluate the mucus membranes for color and capillary refill time to evaluate shock. Any rabbit suspected of shock should immediately be brought to the attention of a veterinarian to decide the protocol. Rabbits may require IV fluids, analgesics, oxygen and its temperature needs should be addressed. All of this must be done using caution not to increase the stress reaction the rabbit may already be feeling.

Diarrhea

True diarrhea in rabbits is an emergency. Technicians should determine that it is truly watery stool, not just soft or feces or cecotropes that the owner is seeing. Diarrhea can be caused by dysbiosis, intestinal parasites, or primary intestinal disease. These rabbits should have a PCV checked and be started on IV fluids as soon as possible.