

FLSC Standard Operating Procedure for Rabbit Anorexia

Purpose

Anorexia may occur in rabbits as a result of specific disease processes, following handling, transport, and experimental manipulation. In some cases, a rabbit may become anorexic for no apparent reason. In all cases of complete anorexia for three consecutive days, the FLSC veterinary staff should be alerted. If a specific disease process has been identified, veterinary intervention should be initiated as dictated by the underlying cause. In the case of anorexia resulting from an undetermined cause, other interventions will be initiated.

Evaluation Procedure

1. Weigh the animal initially and weekly thereafter until clinical resolution.
2. Separate group housed animals to determine if competition or aggression is causing anorexia.
3. Subjectively evaluate the hydration status of the animal regularly.
 - a. Texture of the mucous membranes (become increasingly sticky with dehydration).
 - b. Skin tent test – a fold of the skin on the dorsum (back) of the animal is lifted and released. Ordinarily, the skin should return to its position within 1 to 2 seconds, but will take longer if the animal is dehydrated. Because rabbits have extra skin on their neck, it is best to perform this testing using the skin toward the rear of the animal.
4. Subjectively monitor urinary output. If the amount of urine in the pan is decreased or if there is no urine in the pan, the animal may be dehydrated or could be in renal failure.
5. Subjectively evaluate fecal output. Though anorexic rabbits will produce fewer fecal pellets than normal, the presence of some feces at least indicates ongoing intestinal activity and peristalsis.

Treatment Procedure

1. For dehydration administer subcutaneous sterile saline (0.9%).
 - a. It is generally safe to administer 30 to 40 mL/kg of fluids per day to dehydrated rabbits.
 - b. Warm fluids in an incubator for 30 minutes before giving weak or hypothermic animals the fluids to prevent exacerbation of hypothermia.
2. Offer dietary inducements to encourage eating.
 - a. Items to be offered might include apple, black oil seed, Cheerios™, alfalfa, broccoli, and shredded wheat biscuits.
 - b. Any such dietary addition should only be offered in small portions to encourage consumption of the normal ration, not to replace it.
 - c. Food may be offered in a crock or feeder, sprinkled on top of the normal ration, or offered on the cage floor in the case of an apple or something of similar size.
 - d. Chart all food additions on the daily chart and in the animal medical record.
 - e. Notify the PI of the medical condition and get permission prior to giving any food supplements to animals on study.

Clinical Progression

1. Loss in body weight 20% or more from that at the beginning of the anorexia. In considering this factor, personnel should keep in mind that some rabbits (older, chronically maintained) may have had greater fat reserves, allowing them to withstand prolonged anorexia.
2. Dehydration in which the skin tent lasts for longer than 3 seconds. It should be noted that skin turgor varies with age, the skin of young rabbits naturally returns to normal faster than that of older rabbits.
3. Body temperature of 100.0° F, is a sign that may signal early stages of shock.
4. Any change in behavior, including lethargy, listlessness, circling, ataxia, or other abnormalities.
5. Severely reduced or lack of urine noted in the cage pan.
6. Severely reduced or lack of feces in the cage pan over the course of several days.
7. The clinical and research team to discuss options that best address the well-being of the animal. Because some rabbits may ultimately remain unresponsive to intervention, euthanasia should be considered an option.

Veterinary Intervention

1. Evaluate for trichobezoar (hairball) in the stomach via palpation or imaging. Presence of a trichobezoar may necessitate surgical removal in some cases.
 - a. Administer an oral laxative such as white petroleum jelly, or Felax™ hairball treatment.
 - b. Increase fiber in the diet.
 - c. Provide papain enzymes (in fresh pineapple and juice) to help dissolve the trichobezoar.
 - d. Consult with the investigator to determine if surgical removal of the trichobezoar is an option.
2. Syringe feeding may be indicated at body condition score 2 or lower.
 - a. Use Emeraid – herbivore powder mixed to a paste suitable for delivery via a dosing syringe.
 - b. Feed small amounts 3 to 4 times a day orally.
3. Tube feeding may be indicated when the animal is resistant to syringe feeding.
 - a. Use Emeraid – herbivore powder mixed to the consistency suitable to pass through a stomach tube.
 - b. Feed 1 to 2 times daily by oral gavage.
 - c. Tube feeding can be stressful to an already debilitated rabbit. Should tube feeding result in exacerbation of the animal's condition, euthanasia must be considered.