

Down Rabbit Care Guide

Introduction

A “Down Rabbit” is any rabbit suffering from a medical condition that prevents normal posture and ambulation. A down rabbit could have complete paralysis of the hind limbs, weakness of one or both hind limbs, or orthopedic deformities that make getting around difficult.

Causes of down or head tilt rabbits:

- Middle or inner ear infection
- Stroke (cerebrovascular events)
- Trauma
- Cancer
- Muscle contraction
- Central nervous system infections (such as *E. cuniculi*)
- Toxins
- Chronic arthritic changes
- Birth defects, such as splay leg



changes in mobility and ambulation can lead to additional pain and discomfort. Management of pain may involve the addition of a pain management plan, physical therapy, or alternative treatments like cold laser therapy or acupuncture.

Pain management: Your veterinarian may recommend pain medications, including anti-inflammatories. It is important to strictly adhere to prescribed medication dosing regimens. Do not use over-the-counter medications without the direction of a veterinarian.

Physical therapy: As with other species including humans, maintaining or improving mobility in down rabbits is essential. This is particularly important in rabbits with neurologic conditions affecting the vestibular system, such as *E. cuniculi* or inner ear infections. Some studies demonstrate that long-term Physical therapy may involve passive range of motion therapy and some weight bearing exercises, which helps stretch and strengthen muscles.



Physical therapy in the rabbit

Laser therapy: Laser therapy uses focused light to stimulate the energy-producing part of cells, called the mitochondria. As a result, there is an increase in available energy for cells and important cell signalers, leading to improved circulation, improved healing times, and modulation of pain pathways. Laser therapy has been shown to aid in treating neurological conditions in veterinary patients.

Acupuncture: Acupuncture, also known as dry-needling, originates from Ancient Chinese practices of using needles inserted at specific points of the body to stimulate reflexes within the local, regional, autonomic, and central nervous systems. The effect is improved circulation and modulation of pain and inflammation. This treatment should only be performed by certified specialists.

Recumbency care: Recumbency care is essential for preventing secondary eye or skin issues that can occur in immobile pets. Ocular trauma may occur in the down eye in rabbits with severe head tilts and can be prevented with frequent application of lubricating gel drops. Immobile patients may develop pressure sores. This can be prevented by rotating immobile patients frequently so that they are not lying on one side for extended periods. Rabbits should be checked frequently for urine and feces

QUICK FACTS



Key Treatment and Home Care Options:

1. Treat the specific underlying cause, if known
2. Adjunctive treatments may include:
 - a. Pain medications to keep your pet comfortable, as directed by your veterinarian.
 - b. Physical therapy
 - c. Laser therapy
3. Protect the down eye with eye lubricants (if head tilt or trouble sitting upright is present)
4. Pad the environment
5. Provide easy access to food and water

Diagnosis

A diagnosis of the underlying cause of mobility impairment is based on a combination of the history provided by you, the client, and the physical examination performed by the veterinarian. Complete blood work and diagnostic imaging, such as radiographs (x-rays) or ultrasound, should be performed to evaluate your rabbit's overall health. Specific disease testing and advanced imaging may be recommended based on the initial examination and diagnostic findings.

Diagnostics:

- Physical examination
- Complete blood work (CBC and Chemistry)
- Diagnostic imaging (radiographs, CT scan, MRI, etc)

It should be kept in mind that in some cases, the underlying cause is not identified. Fortunately, general supportive therapy is often effective and many rabbits will recover.

Treatment Options

Primary treatment: Treatment of the primary cause of the rabbit's mobility changes should be the focus of therapeutic and home care plans whenever possible.

Secondary treatment: In addition to addressing the underlying cause of your rabbit's change in mobility,



Urine soaked rabbit

accumulation. Rabbit skin ulcerates easily when kept wet for extended periods, and the bacteria from their elimination can cause skin infections. Cleanliness can be maintained with spot-cleaning with damp warm water washcloth or pet wipes, followed by thorough drying with a towel or a hair dryer on the lowest setting. Avoid pet diapers, as this keeps the urine and feces directly on their skin at all times. Bedding should be changed frequently.

Supportive Care

Due to the variety of symptoms between individual pets, supportive care recommendations may also vary between individuals. Rabbits who are stressed from their symptoms may require anti-anxiety medications. In contrast, bed-ridden and non-ambulatory rabbits may need more accessible access to food and water, modified environments, and recumbency care.

Environmental modification: is provided by making food and water easily accessible, adjusting litter boxes, and padding enclosures. Recommendations may vary greatly depending on the individual rabbit and their condition. Rabbits that are still mobile with balance issues may knock or fall into water bowls, and transitioning to a raised water dish or water bottle should be considered for safety. Food and water should be offered in multiple locations so that it is readily accessible without exces-



Rabbit with head tilt and rolled fleece under

sive movement. Litter boxes can be modified by cutting a side down to help more mobile patients get in and out of their boxes and prevent them from soiling themselves. Enclosures can be lined with foam or rolled blankets and towels to prevent patients from running into hard objects or getting stuck in corners.

Assisted feeding: Many rabbits with severe symptoms will maintain normal appetites if food and water are easily accessible. In some cases, modifying how food and water are provided may not be enough, and syringe feeding of an herbivore supportive care diet may be necessary if they cannot reliably eat or get to their food. Common products include Oxbow Animal Health Critical Care Herbivore, Emerald Herbivore Sustain, Science Selective Recovery Plus, and Sherwood Pet Recovery.



Safely Syringe Feeding Rabbits

Risk to Others

Some causes of neurologic disease in rabbits are potentially zoonotic, such as *E. cuniculi*.

Risk to Factors

- Trauma, especially if it involves the spine or hind limbs.
- Infectious diseases, such as *E. cuniculi*.

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1. Fisher PG, Kunzel F, Rylander H. Neurologic and Musculoskeletal Diseases. In: Quesenberry K, Orcutt CJ, Mans C, Carpenter JW, editors. *Ferrets, Rabbits, and Rodents Clinical Medicine and Surgery*. 4th ed. Missouri: Elsevier; 2021. p. 233-249.
2. Martin, Anne. “Caring for the Elderly or Senior Rabbit.” Lafeber Company, 25 Jan. 2021, lafeber.com/mammals/caring-for-the-elderly-or-senior-rabbit/.