

Care of Senior or Geriatric Domestic Rabbits

As our understanding of rabbit health requirements and general husbandry have grown, more senior and geriatric rabbits are seen. 12



A rabbit is considered **senior** at 5+ years with an expected life span (depending on breed) ranging from 5-12 years. ^{14,19}

We can only call a rabbit **geriatric** when they have reached 75%-80% of their life expectancy and have begun to show age-related disease.¹⁰

Common geriatric conditions seen in rabbits

CATARACTS

A cataract, or cloudiness of the lens, is a possible aging change in the rabbit. A rabbit that cannot see well may show signs of depression, inactivity, scratching at the eyes, and reluctance to move around or come out of their enclosure.

ARTHRITIS

Osteoarthritis (OA) is the most common form of arthritis or degenerative joint disease. The signs of OA in the rabbit will vary depending on the location of lesions, but can frequently include lameness and reduced activity. When mobility problems are seen in an overweight bunny, this can also increase the risk of sores on the bottoms of the feet. Hock sores are also more common rex rabbits, because their feet are not as thickly furred, and in heavier breeds. Osteoarthritis in rabbits can also lead to periods of generalised pain, which can lead to other serious concerns, like gut stasis or urine stasis. The painful, immobile rabbit may also be less likely to groom normally. Skin issues and even ear problems may develop. A rabbit with painful joints may also have difficulty reaching its rump, which can result in difficulty eating their soft, nutrient-rich night feces or caecotrophs. Failure to ingest caecotrophs can cause a messy, faecal-stained rump and can ultimately lead to poor health. The veterinary team will want to investigate further if caecotrophs are found uneaten in your pet's enclosure or attached to your rabbit's rear.

For any veterinary nurse starting out with exotic pets, it is important to understand that geriatric diseases are not ordinarily species-specific, as you are likely to see similar geriatric conditions across multiple species. This means rabbit care and husbandry need not be terrifying. Knowledge from other species is transferable, and a key thing to remember is the goal with geriatric diseases is not to "cure" but rather manage.

CARDIOVASCULAR DISEASE

Cardiovascular disease is becoming more commonly diagnosed in rabbits.²⁰ Possible signs of cardiovascular disease include lethargy, weight loss, abdominal distension, difficulty breathing, or even collapse.

RENAL DISEASE

Kidney disease is common in older animals. Clinical signs can include weight loss, reduced activity, urine scalding of the rear, increased thirst and urination, straining to urinate, and red-tinged (bloody) urine. Thick, sludgy urine is often observed in rabbits fed a diet high in calcium-rich hays, such as alfalfa.¹⁹

As in other species, heart disease and renal disease are often found together in rabbits. Unfortunately, the long-term prognosis is relatively poor for these patients.²⁰

REPRODUCTIVE TRACT CANCER

Uterine adenocarcinoma is by far the most common tumour found in an intact (unspayed) female rabbit. ^{14,18} French silver, Havana, and Dutch breeds are at particularly high risk of developing disease. ^{11,14,18}

COGNITIVE DYSFUNCTION

A reduction in thirst and hunger receptors has been documented in the elderly ^{5,8}, and evidence shows that cognitive function decreases with age in dogs and cats. It is reasonable to assume that cognitive dysfunction also occurs in the rabbit. Tools, such as videoing patient progress, quality-of-life questionnaires, and regular vet checks, can all assist in identifying and monitoring cognitive loss.²

Senior/geriatric rabbit management tips

Simple daily wear-and-tear contributes to geriatric diseases in senior animals. Health status can change rapidly in senior pets, and it is important that changes are caught early.

REGULAR VET CHECKS

Your senior pet should ideally be checked by your veterinarian every 6 months, with laboratory testing performed as needed to rule out any underlying disease.

ROUTINE MONITORING

Small weight changes can indicate disease considerably quicker than clinical signs may present. Weigh your pet weekly and monitor body condition regularly, and seek advice if changes are seen.²²

Regularly monitor your pet for subtle changes in food and water intake, faecal and urinary output, as well as activity and attitude. A good understanding of normal behaviour will help you identify when your rabbit is stressed. Chronic stress is associated with a poor quality of life.⁷

FREQUENT GROOMING

Inactive senior rabbits may require more frequent toenail trims to prevent the development of overgrown claws.¹⁴ Daily brushing and regular clipping of hair around the rear may also be necessary to ensure senior rabbits are kept clean and disease free. Regular handling and grooming will also allow superficial lumps to be detected early. Have any unusual lumps and bumps checked promptly.

HANDLE WITH CARE

Appropriate handling techniques are particularly important in the elderly rabbit. Pairing the strong muscles of the rabbit's hind legs and spine with the relatively lightweight vertebral column means that a strong kick can result in a spinal fracture.^{20,26} It is particularly important that a rabbit with visual deficits caused by cataracts be restrained using only gentle, low-stress handling techniques.²⁰

Gentle massage can prevent elderly muscles and joints from becoming stiff and painful. Massage can be particularly helpful for rabbits suffering from musculoskeletal problems, like arthritis.³

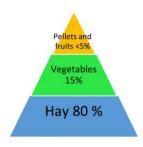
ENCOURAGE WATER INTAKE



Replace a water dropper or water bottle with a ceramic water bowl. Even rabbits that have never been exposed to a water bowl within their lifetimes adapt quickly and will show a significant increase in water intake.²⁴

Some long-ear breeds, like lop rabbits, may require assistance in keeping their ears out of water sources. Placing a gentle tie, like a "scrunchie", can assist in keeping ears dry and disease free (*example shown left*).

FEED A HEALTHY DIET



Maintain your senior rabbit on a balanced and appropriate diet. Your veterinary health professionals will want to complete a comprehensive assessment of your pet's diet so that dietary plans can be created based on your rabbit's individual needs.

If your rabbit is overweight, a weight loss programme that focuses on calorie restriction and (if tolerated) gentle exercise, should be implemented. This plan should include achievable goals and regular check-ins.

Feed a diet that is low in calories and high in fibre. Hay should make up to 80% of a rabbit's diet. Offer unlimited amounts of high-quality grass hay, such as timothy or meadow hay. Avoid calcium-rich hays, such as lucerne or alfalfa, in senior rabbits. Approximately 15% of the diet should consist of a variety of washed, pesticide-free, leafy greens, with an emphasis on freshness as vegetables lose their nutritional value post picking. ¹⁶ Offer small amounts of high-fibre pellets and fruit as a treat. Give pellets in correlation to body condition, reducing or increasing the amount of pellets fed based on individual needs.

ENCOURAGE EXERCISE

Exercise has many benefits. Getting your rabbit up and moving will allow you to check for any physical changes. Gentle massage and physiotherapy can also help rabbits suffering from osteoarthritis by preventing joints and muscles from becoming stiff and painful.³

KEEP THE BRAIN ACTIVE

Groom and play with your pet regularly and encourage moderate exercise on a daily basis. Get creative! Enrichment through the use of toys, creating areas for exploration, and other forms of environmental enrichment are great ways to engage the mind.

TAILOR THE HOME ENVIRONMENT

There are a number of approaches that can be made to improve the quality of life for senior pets. These can include the addition of medications, alterations in diet, and tailoring the home environment to meet your rabbit's individual needs.⁹

Maintain a safe, low-stress home environment with exposure to sunshine and good ventilation. ^{23,25}

Also limit movement of food and water bowls. Maintaining bowls in the same place will encourage adequate food and water intake for rabbits with cognitive dysfunction or visual deficits caused by cataract(s).⁴ Also avoid placing furniture or other obstacles in your rabbit's path that can increase the risk of accidents or confusion. Provision of some visual security in the form a towel or cage covering can also be helpful.

Small changes can also be made around the home to assist rabbits with osteoarthritis. Appropriate bedding and daily spot-cleaning of the enclosure is fundamental.⁶ To prevent pressure points or sores on the bottoms of the feet¹⁴, pad surfaces with a fleece blanket or something similar and offer non-slip surfaces to provide secure footing and prevent injury.¹⁷

Single-tier housing is preferable for senior rabbits, but when unavailable, provide gently sloping ramps and platforms with easy-to-clean, non-slip surfaces. Avoid steps and steep ramps whenever possible as this will cause over flexion (hyperflexion) and hyperextension of joints. By the same token, offer low-sided litter pans, so that rabbits can easily enter and exit.¹⁴

MEDICATION/SUPPLEMENTS

Your veterinarian may prescribe medications or supplements for your senior or geriatric rabbit. Pain medication and omega-3 supplementation may be indicated for the rabbit with osteoarthritis. There may also be benefits to omega-3 supplementation using a ground flax-seed supplement for rabbits with renal disease or cardiovascular disease. Evidence also suggests that supplementation of an antioxidant, such as omega-3, may improve cognitive function in aged mammals, although there is no research on its use in rabbits with cognitive dysfunction.

Conclusion

A wealth of information is available on the care of senior and geriatric conditions seen in rabbits. Dietary modifications and environmental changes can improve the overall welfare and quality of life for senior rabbits. When geriatric disease exists, the goal is not to cure but instead to manage senior rabbits during their final years.

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