

Caring for your senior pet

It may seem like your pet was a puppy or kitten just yesterday, but pets age much faster than we do and the years just fly by. Senior pets are very special! They know you well, you know them well, and they are just the sweetest. However they do require special care to keep them happy and healthy for as long as possible.

Mobility problems

Many senior cats and dogs have difficulty getting around. This may be due to pain and stiffness, for instance of the neck, back, or limbs, or to neurological conditions that interfere with your pet's balance and coordination.

Arthritis (degenerative joint disease) causes stiffness and pain, and can interfere with nerves that convey proprioception to the brain. Proprioception is the sense of where neighboring limbs are in space; if there are proprioceptive deficits, pets may drag a leg and appear uncoordinated. With arthritis, stiffness and pain are usually worse in the morning then improve as your dog or cat exercises.

Degenerative myelopathy is another condition that can cause proprioception deficits and incoordination, however this is not painful. Some cases may develop urinary or fecal incontinence but this is uncommon. Degenerative myelopathy is a condition in which the insulation ("myelin") sheath around the nerves is lost, resulting slowed nerve conduction. It is most common in German shepherds, but can be seen in any dog breed. There is no test or treatment for degenerative myelopathy, however testing such as MRIs and spinal taps can rule-out other potential causes of these symptoms. Aminocaproic acid is a medication that reduces this destruction of the myelin sheath and thus can help some dogs with degenerative myelopathy, with improvement usually seen within 8 weeks.

Any other condition that involves the spinal cord can cause incoordination, proprioceptive deficits, limping, pain and incontinence, including but not limited to disk herniations and spinal cancer. Your veterinarian may have a strong suspicion of these conditions; however referral to a neurologist for specialized testing is required to confirm these diagnoses.

Cats can develop arthritis, too! Their signs are usually very subtle; most cats will just stop jumping on furniture, and some will stop using the litterbox if it is difficult for them to get into the litterbox or if there is not enough room for them to posture as they would like to in the box.

Tools such as slings and gripped booties can help you help your elderly pet move around better. If you live in the Carlsbad area, the Into the Sunset Pet Transition Center in Sorrento Valley (<http://intothesunsetpet.com/>) sells mobility support devices for your aging pet.

For more information on treating arthritis, please visit our Pet Health Library: <http://lacostavet.com/pet-health-resources/pet-health-library.html>

Cognitive dysfunction syndrome (senility)

Cognitive dysfunction syndrome (CDS) is a poorly-understood condition that affects many dogs and cat. Similar to changes observed in humans, this affects some but not all pets. Pets affected by CDS may stare off into space, repeatedly lick surfaces in the home, appear to not recognize family members or other pets, urinate or defecate in the home or appear to wander aimlessly. There is no specific test or treatment for CDS, but there are many ways you can provide support to your pet.

- *Careful selection of medications:* if your veterinarian suspects that your pet has CDS, he or she will be careful when selecting medications for other conditions such as allergies or arthritis. Some medications can further reduce cognitive function, while other medications can actually help improve cognition.
- *Diets:* diets should be low in carbohydrates, calories and saturated fats. Diets should also be sufficient in omega 3 fatty acids, B vitamins and magnesium. Hill's b/d™ is a diet well-balanced for pets with cognitive concerns.

- *Lifestyle changes:* just as elderly people benefit from puzzles, games and a good night's sleep, pets with cognitive dysfunction should be mentally stimulated and have a stable sleep pattern.

While your elderly dog may suffer from arthritis and thus have difficulty going on long walks, it is important that he or she does get outside, so they can interact with new people and animals and explore their world. If possible, you can consider a dog “stroller”, so that your dog can go out and about without feeling tired or sore. If this is not possible, consider several short walks and bringing the enrichment to your dog—massage, pet and hug your dog daily. Ohio State University's Indoor Pet Initiative (<http://indoorpet.osu.edu/>) has some great resources for enriching the environment of cats and dogs.

Many elderly pets sleep all day and are restless at night; during the daytime, your pet should be kept stimulated and in a brightly-lit room or outdoors so that they do not sleep excessively. At night your pet should be in a darkened room to encourage sleeping; pets with arthritis may have difficulty sleeping comfortably, so this should be treated. If your pet still paces all night long, discuss the use of melatonin with your veterinarian to see if this is appropriate for your pet.

- *Anipryl (selegiline):* this is a medication for dogs that increases the levels of dopamine in the brain, which increases brain activity and thus cognition. It is given once daily, usually in the morning. While this does not cure CDS, it can be very helpful for many dogs.
- *Neutricks (apoeaquorin):* this is an over-the-counter supplement that reduces the destruction of nerves in the brain, and thus improves cognition.
- *Senilife:* this is an over-the-counter supplement that contains antioxidants to support brain health and enhance memory (ginko biloba, resveratrol) and improve the strength of neurons to reduce damage to brain tissue (phosphatidylserine, B vitamins, Vitamin E)
- *Melatonin:* in addition to improving sleep cycle, melatonin also reduces nerve cell death in the brain.
- *Additional medications and supplements that improve the strength of brain tissue:*
 - S-adenosyl methionine (SAME)
 - Omega 3 fatty acids
 - Selenium
 - Magnesium
 - Many others!

Dental disease: most pets develop dental disease as they age. Many owners decline a dental procedure in middle aged to early geriatric pets because they are worried about putting their pet under general anesthesia. However, it is important to keep in mind that this disease will only progress with time; if you choose not to do a dental on your 10 year-old Labrador Retriever or 15 year-old Siamese cat, in 5 years you may have to do a dental on your then 15 year-old Labrador Retriever or 20 year-old Siamese cat, as they are no longer eating or have painful mouth abscesses. As the old adage goes, an ounce of prevention is worth a pound of cure: maintaining life-long dental health is far better for your pet then waiting until they have severe dental disease. For more information on our dentals, also termed complete oral health assessment and treatment (COHAT), please visit our Pet Health library: <http://lacostavet.com/pet-health-resources/pet-health-library.html>.

Idiopathic vestibular disease: many elderly dogs and some elderly cats develop a condition known as idiopathic vestibular disease, which is very similar to vertigo in humans. The vestibular apparatus is located in the inside of the ear and is in charge of balance and orientation. Any disease that affects the vestibular apparatus can cause the following clinical signs:

- Horizontal eye twitch (nystagmus)
- Head tilt to one side
- Leaning to one side
- Uncoordinated walk (“drunken sailor”)
- Circling
- Motion sickness (vomiting)

Many owners think their dog or cat has had a stroke! Pets can have a stroke, however this is uncommon. While inner ear infections and brain tumors can cause these signs, in most cases the cause of vestibular disease “idiopathic”, meaning unknown. If your pet’s ear looks normal on an ear scope your veterinarian may prescribe anti-nausea and anti-motion sickness medications such as Cerenia and meclizine, respectively. If this truly is idiopathic vestibular disease, your pet should improve within 72 hours and be normal within 7-14 days. 60% of cases will happen again.

If your pet does not respond to these symptomatic therapies, a brain tumor is possible. The suspicion of a brain tumor increases if your pet otherwise has behavioral changes or if you have observed any seizures. An MRI is required to confirm a brain tumor; your pet can be referred to a neurologist if you would like this done.

Cancers

Many geriatric pets do eventually develop cancer. It is important to keep in mind that veterinarians approach cancer differently than human oncologists do. When the word “cancer” comes into discussion, many pet owners quickly remember a friend or family member who suffered through chemotherapy or radiation. Veterinarians rarely treat cancer with the goal of a “cure,” instead our goal is to maximize quality of life for as long as we can. Chemotherapy doses are generally lower than the doses used in humans, and pets are very tolerant of these treatments—rarely can you tell by looking at a pet that they are on chemo! Surgeries tend to be less invasive and often focus on “debulking” tumors rather than removing them entirely, in order to make pets more comfortable and increase the tumor’s susceptibility to chemotherapy. Radiation can be done with palliative rather than curative intent, which involves shorter radiation courses.

Beyond this, is also important to remember that not all cancers are “created equal”. Some cancers can be treated with oral medications such as steroids, or can be cured with a relatively simple surgery. Some cancers take many years to progress and are unlikely to bother your pet.

If there is a concern about possible cancer in your pet, the first step will be locating the cancer itself. To learn more about external tumors, please read our “Lumps and Bumps” article in our Pet Health Library (<http://lacostavet.com/pet-health-resources/pet-health-library.html>). For internal tumors, finding the tumor may require imaging such as an x-ray, ultrasound, CT scan or MRI.

Once the cancer is located, a biopsy is taken to determine the type of cancer and the cancer grade. Some internal cancers may require surgery to collect a biopsy, however many abdominal tumors can be sampled with ultrasound guidance without necessitating surgery. Within a type of cancer, such as a hepatic adenocarcinoma, the cancer can be high-grade, low-grade, or anything in between. A high-grade cancer is worse than a low-grade cancer: cells within a low-grade cancer are well-defined, organized, and are dividing slowly. Cells within a high-grade cancer may be very poorly-defined, irregular and rapidly dividing.

Once the cancer type and grade is determined, the cancer must be staged. While the terminology varies between cancers, generally a stage 1 means there is only the tumor itself, stage 2 means the cancer has spread to local lymph nodes, and stage 3 means the cancer has spread to distant sites. To stage your pet’s cancer, we take an aspirate sample of the lymph node that drains the tumor site and do imaging of the distant site where that type of cancer usually spreads (metastasizes). For many cancers, the lungs are the most common first site of spread, so a lung x-ray will be recommended. Other cancers may spread to particular bones, so x-rays will be taken of these areas to rule out stage 3 cancer.

Once the cancer type, grade and stage have been determined, prognosis can be better defined and treatment options can be discussed with you. If the cancer is stage 1 and is a small tumor that can be removed easily, generally surgery will be

recommended. The tumor will be sent to a pathologist for microscopic assessment to confirm that the tumor was removed entirely. If not, radiation may be recommended. If the cancer is stage 2 or 3 or if it is a type of cancer with a high metastatic rate, generally chemotherapy will be recommended whether or not the tumor can be removed surgically.

If you are concerned about cancer in your pet, you should contact your veterinarian and arrange for a physical examination.

Is my pet “too old” for anesthesia?

We hear this every day! Old age is not a disease, it just increases the chance that your pet has other diseases. Prior to doing anesthesia in an elderly pet, we require more extensive bloodwork than we do in younger pets to ensure that no special precautions need to be taken and that no dangerous diseases remain hidden. Depending on your pet's history, we may also recommend chest x-rays and a urine test to confirm good kidney function. While your pet is under anesthesia, we are extra cautious and will be very careful to keep him or her warm, hydrated and at an appropriate level of anesthesia.

While the risks of anesthesia can never be completely eliminated, we pride ourselves on our anesthetic record at La Costa Animal Hospital. We have not had an anesthetic death in 9 years (knock on wood) and in the past year have safely performed anesthesia on a 21 year-old cat and a 16 year-old dog.