

Caring for the Hospitalized Senior Pet

Amy Newfield, MS, CVT, VTS (ECC)

Veterinary Team Training

VetTeamTraining@Gmail.com

INTRODUCTION

Pets come in all shapes and sizes as well as ages. The younger canine and feline patient does not require the same needs as the senior pet. Senior pets are unique and can be closely related to their human senior counterpart when it comes to issues that come up in a hospital setting. Understanding their unique needs will allow you to provide the best nursing care for that patient.

DEFINING 'OLD'

Dogs and cats age differently. If a human gains 'senior' status at the age of 50 (according to AARP benefits) that would mean that cats would be given senior status at age 9 years and dogs would be given senior status somewhere between age 6-9 years depending on their size. Larger dogs age faster than our smaller breed dogs. The term geriatric, as defined by the World Health Organization, applies to a person over the age of 65 years in first and second world populations. That would put our cats at age 12 years and dogs between 8-12 years depending on their size.

Age is just a number and this is true in both human and veterinary medicine. We certainly know active senior and geriatric people that run marathons, hike, compete in dance competitions and are yoga masters. Then again we also know people in that same age bracket who are bed ridden, in wheelchairs, cannot see and have a hard time hearing. The same holds true for our dogs and cats. Age really is just a number, but how they age depends largely on their 'lifestyle' choices their owners made for them as well as the environment they grew up in. For the same reason as people you can get a 12 year old 50 lb dog that still hikes mountains, competes in agility and acts like a 5 year old dog.

As we dive into understanding the hospitalized pet we will need to recognize that there are some exceptions to the 'senior' rule. That being said the majority of dogs and cats will require specialized care. The older they are the more care they will need.

LOSING THE SENSES

Dogs and cats lose their senses as they age just like people do. People can say "I can't hear as well" or they can put on bifocals to help them compensate. Pets can't tell you they are having problems with their sense and there isn't much that can be done to help them.

Sight

It is well known that dogs and cat have senses that far exceed humans. The exception to that is the canine and feline vision. Human vision and dog/cat vision almost cannot be compared they are so different. We can see a better range of colors. They do see colors, but not as many. We know they can distinguish between blue and red, but are confused between green and red colors. While they can see colors it is more likely they look for contrast and shading. We have better vision for distance. This makes sense because we are higher than them. Grass, legs and rocks obscure their view. Even your largest Great Dane or the best sighthound cannot see as far as a human being. Their primary forward view is only 60° versus our 140°. This means we can see 140° very well at all times compared to their 60° simply because our eyes face forward.

All of those things aside they make up with other aspects of their vision. Both the dog and cat have an amazing ability to process speed faster than us. This explains why cats can catch fast moving bugs and dogs can run out better than an outfielder and catch a fastball like it was nothing. They do see better in the dark than us and their peripheral vision is better as well boasting a 240° view versus our mere 200° view. So while we can see farther and more colors, they can process speed, dark and have a better peripheral range than us.

All of this information about sight is important. As dogs and cats age they lose their ability to see in the dark first. As such pets will start to bump into walls or may need time to adjust to rapid light changes in the house. They will also lose depth and how fast they process speed. This is why older dogs miss steps and can't catch food like they use to. Knowing that dogs and cats have vision problems means that we need to take a moment when we walk them or carry them from a lighter room to a darker room like radiology. It can be scary in an unfamiliar place if you can't see so before you just grab the dog in the dark radiology room, take a moment for their older eyes to adjust and talk to them. Even a transition from bright sunlight into a darker hallway can cause a problem for them so just take the time to allow them to have their eyes adjust.

Hearing

It is well known that our human ears are no match for our dog and cat patients. Unfortunately as they age, all dogs and cats will experience some hearing loss. How much is hard to determine as they are limited hearing tests that can be performed in our veterinary patients. Certainly some conditions like chronic ear infections can cause a pet to become deaf long before they were seniors. Pets exposed to loud noises like hunting dogs will experience hearing loss sooner than others. Owners often assume their pet is purposefully ignoring them, but the reality is they may not be able to hear them as well or at all.

This comes into play because talking to pets is one of the primary ways we communicate with them. Many times pet owners tell us that their pets cannot hear. Knowing this means we will need to ensure they can see us so we don't startle them. Getting in front of the dog or cat before picking it up may mean difference between a bite or not. If an older pet is facing the back of a cage or kennel be sure to move their blankets and let them know they are there before you just reach in.

Taste

It is known that human and pets lose taste buds and experience taste changes as they get older. What you enjoyed when you were younger now is something you don't enjoy as much if at all. Same for our older pets. It is estimated that only one quarter of the taste buds are still active in our geriatric pets. Dental disease or other diseases (kidney failure) may leave everything tasting badly in the pet's mouth so they may not want to eat as much.

In a veterinary clinic our older pets need to have foods warmed up and multiple foods may need to be tried. Chicken, tuna, yogurt, baby food and feeding cat food to dogs are many of the things you may need to try to get the patient to eat.

Smell

Smell is the most important for our dogs and potentially for our cats as well. We cannot even come close to comprehending their fantastic sense of smell. Humans have about 5 million receptors in our nasal passage that process smell. Cats have about 80 million receptors while pale to that of the dog that boasts 300 million. This is why dogs rely the most on this sense. While cats do have an amazing sense of smell just the size of their nose dictates that it can never be as good as

a dog's. Think about how many times you have seen dogs that have been in the hospital be brought up to their owner, see them, and not react? It's simple. The dog has to smell and hear the owner most of the time before they recognize them. Think of the cats that come home after being in the veterinary clinic for a long time only to have its housemate attack them or vice versa? It's suspected that after the age of 10 they lose a significant amount of this sense. That being said they compensate with their other senses.

This sense correlates with taste. Pets that are experiencing upper respiratory or airway issues may not want to eat as much. Similarly to taste we may need to warm up food or give them more enticing foods.

NURSING CARE

There are many positive things of having a senior pet in the hospital as well as some unpleasanties. Compared to juvenile cats and dogs, most senior pets have already developed an understanding of the veterinary hospital. They are more tolerant to procedures like catheters, blood draws and even hospitalization. Kittens usually try to remove their catheters while older cats rarely touch them. Puppies chew on everything and spin constantly making delivery of IV fluids almost impossible at times. The senior dog usually just lies there quietly.

Older pets are similar to older humans. Being in a hospital often confuses them, agitates them and if they go under anesthesia some of them likely suffer mild forms of dementia similar to human seniors/geriatrics.

Behavior

Changes in behavior as dogs and cats age are common. How they react to being hospitalized can be a challenge. It is well known that dogs can suffer from an Alzheimer's-like process (canine cognitive dysfunction) with newer information showing cats can also be affected. They may forget who their owners are, where they are, their commands or even that they are suppose to eat. As cats age it is more difficult to determine how much memory loss occurs. Cats relationship with humans isn't built around obedience, walking with us and outdoor bathroom facilities. A study performed out of UC Davis in 2001 showed that 30% of dogs between 11-12 years of age showed some senility while 68% between 15-16 years had some signs. Pets can become disoriented, have sleep changes where they are more awake in the evening, develop anxiety or compulsive behaviors and forget housetraining behavior.

Put that same pet into a hospital setting and you may find you have a behavior nightmare on your hands. Older cats are typically not an issue in a hospital setting. They tend to become quieter, want to hide and may just stare into space confused by the whole situation. There are some that will become aggressive because they are disoriented. Cats may forget to use the litter box or their disease process prohibits them from being able to climb into it. A large percent of older cats will urinate on themselves in a hospital setting. It is unknown how much is senility, fear, medical or a combination of all.

Making hideaway boxes for older cats or putting them in a quiet area can help reduce the level of confusion or frustration for them. Using low access litter boxes or even chucks may help with bathroom issues.

Older dogs can vocalize and pace if they are disoriented. Sometimes older dogs can snap or become aggressive out of fear. They don't know where they are and are scared. Above all being compassionate to these patients is important. They are not being "obnoxious". They are often older pets who are confused and have no idea what is going on. Talking to the dog using familiar words,

having a scent object from the owner or using food to make friends is important to dealing with the confused older dog.

Arthritis

Both dogs and cats suffer from arthritis. Cats and small dogs are smaller so they carry their weight easier than an older larger breed dogs. Overweight pets suffer the most with arthritis. Pets are amazing when it comes to dealing with arthritis. Both dogs and cats rarely cry out because of sore joints. They may be slower at getting up or moving around, but vocalization is rare. That being said owners at home are moving and manipulating their arthritic pets like veterinary personnel are.

Older cats may cry when they are picked up and they rarely tolerate strong scruffing. Older pets have thinner skin so pulling up on the cat's scruff around its sore arthritic neck is never appropriate. Pulling on back legs to get a blood sample from the medial saphenous may be painful and lying the cat on its side for a radiograph may elicit aggression.

Small dogs may try to bite when picked up out of cages or from floors. Older dogs may yelp when forced into a sit or down position. Rolling a vein on a front leg for a catheter may be downright painful in a pet with elbow arthritis.

Muzzles and restraint devices are a must in the older pet to protect the veterinary staff, but pain medications are an equal must for these patients. It is not fair to force the older arthritic dog into a down and then crank on its front legs to place an IV catheter if it's painful. Please consider allowing the pet to stand, use less restraint or advocate for pain medication.

Older dogs and cats need to have plush bedding. It's not okay for them to lie on one tiny towel. A nicer bed equals a happier more comfortable pet who is more likely to sleep and therefore heal faster. Clinics should consider investing in foam or orthopedic beds for their older patients.

Anesthesia

It is well documented in older adults that after anesthesia they wake up confused and cannot remember where they are located called postoperative cognitive dysfunction (PCD). They may appear confused, agitated, aggressive or depressed. In 2008 Duke University released a study that showed geriatric adults can experience PCD signs/symptoms for up to 3 months following anesthesia (Anesthesiology. 2008 Jan;108(1):18-30). They studied over 1000 adults with varying age ranges from young to old. All candidates were given memory tests before and after anesthesia. About 36-41% of all adults had some PCD immediately following the procedure. All age groups were considered recovered by 3 months except those older than 60 years where 12.7% of the population still had some PCD.

A similar syndrome likely occurs in our geriatric patients. This would explain when they recover from anesthesia some vocalize, pace, pant and appear disoriented. PCD would also explain why some dogs are depressed for months following anesthesia. Sometimes these patients need to be sedated or even put on a CRI of sedation until the anesthesia wears off. That being said even the sedation can make them suffer more dementia. Getting these patients back home to their familiar environment or allowing owners to visit may help.

It's important to remember that older pets do not require as much sedation or anesthesia as younger patients. They also metabolize drugs slower. Cats are prone to renal failure with most having at least 10-20% loss of renal function. Glomerular filtration rate is slower in both species along with total hepatic blood flow.

Opioids and benzodiazepines have minimal cardiovascular and respiratory effects and are a good choice for senior pets. Acepromazine can be used, but unfortunately it can cause hypotension and hypothermia which can be life threatening in older pets. Alpha-2 agonists (dexmedetomidine) can be used, but with extreme caution as it is very taxing on the cardiovascular system (hypotension, hypothermia, bradycardia, reduced cardiac output). Ketamine, diazepam, midazolam and propofol can all be used in pets without issues with good cardiovascular systems. Etomidate should be considered in those with questionable or poor cardiovascular systems. The lowest dose of any drug should be used in senior pets.

Bathroom Habits

Both dogs and cats may have diseases, medical conditions, reactions to medication or behavior changes that cause them to have accidents. In both dogs and cats urinary incontinence and urinary tract infections (UTI) are significantly higher than younger pets. There is a higher rate of UTIs in pets that are stressed so any older hospitalized pet is at risk for developing one. It's believed this is because of the decrease function of the immune system.

Keeping an older pet clean and dry is imperative. Dogs are more prone to developing fecal and urine scald. Pets that soil themselves should be washed (not just towel dried) to ensure the skin is free of urine and fecal matter. Older pets have a harder time thermoregulating so drying them is important or putting a heat source in their cage after a bath is a must. Hair may need to be shaved/clipped if scalding is noted. Cream may need to be applied to help heal scalded area.

Dogs may have a hard time going outside. Providing them medical chucks in their cages or helping sling walk them outside should be considered. Cats should also be provided medical chucks or low level litter boxes.

Nursing Care For Specific Diseases

Older pets are more prone to diseases/injuries such as cancer and organ failure. Kidney failure patients, diabetics and patients on loop diuretics (furosemide) will need more water. Giving water to patients who are on high fluid rates is often overlooked. All of the mentioned patients have a demand for increase water intake.

Older dogs and cats are more prone to developing brain tumors or vestibular syndrome than younger pets. Dealing with a neurologically impaired patient can be challenging. Behavior can range from depression to aggression. Pets may be happy with you one minute and aggressive the next. They may experience seizures, have a permanent head tilt, be ataxic or suffer from rolling. Pets may need padded cages and staff may need to become creative with ways to brace pets or keep them safe if they are prone to rolling and thrashing. Caution should be used in these pets since they are often frightened as to what is happening to them or a tumor itself may be causing behavior changes.

Heart disease is common in older pets. Monitoring pets respiratory rate and ensuring the appropriate amount of fluids is administered is important in avoiding fluid overload. Listening for increased lung sounds is equally important.

Owners decide whether to treat or not treat their older pets. Pets only live in the "here and now" and have no concept that what is happening now will benefit them later. It is always a hard discussion to have with the owner, but helping them to understand that long hospitalization stays and long-term treatment may not be in the pet's best interest especially if they are geriatric. In the end it's the owner's decision and we can do our part by helping the animal through its stay by being kind and providing excellent nursing care.

CONCLUSION

Pets give their lives to us to make us happy. They work for us, play with us and are there for us no matter what. As a pet ages it can be difficult to deal with the changes. Understanding the older pet and how it responds to hospitalization will mean a better cared for pet and better client communication. Treating the elderly with the respect they deserve is key to making their few moments left as pleasant as possible.

References Available Upon Request