

## **COGNITIVE DYSFUNCTION**

By Janet Lalonde, DVM Reprinted with permission from Janet Lalonde

'Kelly' wandered aimlessly down the main hallway toward the bedrooms. Her gait was unsteady as she turned into the children's room. This behaviour was peculiar, as she normally avoided the room, preferring the quiet comfort of my bedroom to the noise and commotion created by two active youngsters. She began to whine. When I went to her aid, she urinated on the carpet in front of me. She had just come in from outdoors. My first impulse was to holler a sharp "No!" but, having witnessed the odd behaviour just seconds earlier, I held my tongue, scooped her up, and carried her back outside.

Kelly was a 14-year-old Whippet. She was a dog that attended shows all over the United States, Canada, and Bermuda, as well as several obedience trials. She loved to travel and was especially fond of hotels. She was my housedog and the matriarch of the kennel – alpha bitch with a capital A. Together we wrote many chapters about life in Alexandria. She competed with me for her share of the bed every night and had done so since eight weeks of age. She always coveted two-thirds.

Kelly was always a dependable and extremely clean dog; there were never any accidents in the house. She was always first to our hotel room when off-leash in the hallway; it didn't matter where we were staying. She was the smartest dog I have every owned. She was demanding and generally got whatever she wanted. In return, she gave me friendship and loyalty. She was my best friend, very much my dog.

Kelly's behaviour continued to change for several more months. She spent most of her day sleeping and constantly seeking warmth. Over time she became fragile in appearance, hated to go outside during the winter months, and at times seemed to go through periods of disorientation, as if she didn't know where she was or what was expected of her. It was frustrating to watch her decline and not be able to help her. Eventually, I had to make a difficult decision. Quality of life was no longer there for her, and I put her down. Kelly was suffering from Cognitive Dysfunction (CD) Syndrome, as well as other disorders. Several years later a drug was introduced to the market to treat CD.



## Cognitive Dysfunction (CD)

In clinical practice, I provide advice to clients who are having difficulty coping with their aging pets on a daily basis. Complaints range from behavioural changes, incontinence, loss of hearing and/or vision, and increased stiffness to medical problems associated with congestive heart failure, renal failure, or debilitating spondylarthritis. Coping with an aging pet is very similar to coping with a geriatric human member of the family. Family members constantly find themselves readjusting daily schedules to accommodate the increasing needs of an older person. This also applies to the geriatric pet (which is generally considered to be an animal seven years of age or older; depending on the breed).

Cognitive dysfunction is a term used to describe the occurrence of multiple geriatric behavioural problems. In common parlance, it is often referred to as senility or "old dog syndrome." Cognitive dysfunction is a well-known problem affecting aging humans. Documentation reveals that severe CD or dementia prevalence in humans increases with age, and the incidence is as high as 47 percent by age 85. Symptoms of CD in our dogs are decreased activity, changes in sleeping habits (dogs sleeping all day or repeatedly awakening you at night), and poor response or little interaction with the family. Loss of house training, changes in signaling to go outside, and disorientation or getting lost in the house or yard are additional signs of CD.

CD, when properly diagnosed, can be treated with the drug known as Anipryl (Deprenyl Animal Health Inc.). Dogs suffering from CD have been shown to accumulate betaamyloid protein in the brain; the amount of protein accumulation correlates with the severity of CD. This accumulation of amyloid is similar to humans suffering from Alzheimer's disease. The amyloid is neurotoxic, leading to abnormal behaviour. Anipryl promotes the normalization of brain tissue by protecting and rescuing injured neurons (brain cells) and enhancing the removal of toxic substances, thereby slowing the progression of neurodegenerative disease. Anipryl appears to be a safe drug to use, as no serious side effects or adverse drug reactions have been reported during clinical trials.

An accurate diagnosis of CD is important before commencing treatment. CD is a clinical syndrome that is diagnosed by a clinical description of unusual behaviour. Other disorders such as liver or renal failure, diabetes, and congestive heart failure must be ruled out – or at least recognized – as they may be contributing to clinical symptoms.



Dogs with diabetes or renal failure, for instance, will also urinate on the floor. Biochemistry blood test, urinalysis, and whatever additional tests your veterinarian may deem warranted should be performed before using Anipryl.

## The Effects of Aging

One must recognize that an aging pet is similar to an aging person. The joints do not function the way they once did, the back is not as strong and the body's organs are deteriorating. A pet that is slow to get up or reluctant to go for walks is probably suffering from degenerative joint disease or possibly disc disease. There are many NSAIDs (non-steroidal anti-inflammatory drugs) on the market today that help alleviate chronic discomfort. Housedogs that begin to urinate or defecate indoors may have developed a medical reason for the behaviour. Have your veterinarian run a blood-chemistry profile and urinalysis to rule out a medical problem. Many are treatable.

If your dog has difficulty climbing stairs, build a ramp. If that is not possible, utilize a baby gate to keep the dog from attempting to climb the stairs and hurting himself. If you are going to be away for an extended period of time, make your dog comfortable by placing a foam bed in a walled-off kitchen or other room with linoleum flooring, so that an 'accident' is not such a problem to clean up. Many people hire dog sitters to let their pets outside once or twice a day while they are away. Shorten your periods of absence or take other measures to accommodate your pet's needs. Do we not do that for our own kind?

Coping comes down to common sense and understanding the aging process. However, recognizing physical and mental deterioration eventually requires us to consider quality of life. Heroics employed to extend a companion's life, when there is no quality of life, or an inability to deal with the inevitable decision of euthanasia, has always frustrated me. One must be compassionate, but one must also be realistic when considering the welfare of the dog.