## **Cognitive Dysfunction in Older Cats**

By Melissa Bain, DVM, DACVB

As a function of better veterinary care, advances in nutrition, and protection from accidental death, cats are increasingly living longer lives. With this longer life span comes age-related changes in various systems, such as the visual, auditory, kidney, and muscle and joint systems. Degenerative changes also occur in the brain, which can result in noticeable loss of full cognitive function. As many as 40% of cats older than 17 years of age can show severe impairment in their cognitive ability.

Relatively little research has been done on cognitive impairment in older cats, but the few studies do indicate that cats develop behavior changes as they get old. The most common behavior problem related to cognitive dysfunction is inappropriate elimination. Some other



common signs that have been documented are excessive vocalization, changes in the sleep-wake cycle (when the cat is asleep all day and awake and agitated at night), and disorientation.

Research into the physical changes in the brains of cats affected by cognitive dysfunction has just begun, but preliminary results indicate that affected cats show changes similar to dogs with cognitive dysfunction and people with Alzheimer's disease. Excessive amounts of a specific type of protein are deposited in the brain, which impairs its ability to function as effectively.

There is treatment available for cats with this problem. First, though, other medical problems must be ruled out. Since there is currently no test to diagnose cognitive dysfunction in animals, the diagnosis is made by excluding all other potential causes of dementia. Cats with medical disorders such as other neurological diseases, kidney and liver disease, feline leukemia (FeLV), feline immunodeficiency virus (FIV), blindness, hearing impairment, and arthritis can show signs that can be mistaken for cognitive dysfunction.

Treatment for cognitive dysfunction involves making the cat's environment as comfortable and predictable as possible, attempting behavior modification, and possibly using medication. You can make the cat's environment predictable by keeping the physical arrangement of your household the same. Sleeping areas should be comfortable and easy to access. Close off areas where your cat may get stuck or injured.

Litter boxes should be very accessible and attractive to your kitty. You could try placing at least one litter box on each floor or in each area of the house. Keep the litter boxes very clean and make sure that the edges are low enough so that the cat can comfortably get into and out of the box. If your cat has historically gone outside to eliminate, you

should start supplying litter boxes for your cat inside, since it may become more difficult for a cat with dementia to get outside, or to find the outside.

If your cat is starting to reverse her sleep-wake cycle, you should, as much as possible, keep your kitty awake during the day and early evening, so that it is more likely that she will sleep during the night.

Medication may be an option for some cats. There is currently no medication licensed to treat cats with cognitive dysfunction, but anecdotal evidence has indicated that the medication used to treat dogs with cognitive dysfunction may be of benefit for some cats.

So, if your cat is exhibiting any of the symptoms described above, consult your veterinarian. He or she can rule out any other potential causes of dementia and then advise you about treatment options if it seems likely that your cat suffers from cognitive dysfunction.

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