

## CANINE COGNITIVE DYSFUNCTION SYNDROME (CCDS OR CDS)

As we age our systems start to lose some of their former abilities. Our senses (hearing, sight, smell and taste) become less sensitive. Bone and muscle masses decline. Internal organs are not as efficient. We become more likely to develop heart and/or circulatory problems, cancer, kidney and liver disorders. Our brains undergo changes resulting in cognitive (perception, memory, reasoning) decline. These things are true for our dogs as well. Canine Cognitive Dysfunction Syndrome (CCDS or CDS) is similar to, but not exactly the same as, Alzheimer's disease in humans. It is the age-related deterioration of cognitive abilities characterized by behavioral changes in dogs that cannot be attributed wholly to general medical conditions such as neoplasia, infection or organ failure. It is caused by physical and chemical changes that affect the brain function in older dogs. There is no specific test that will diagnose CDS. It is a diagnosis of exclusion meaning that the diagnosis can only be reached after other medical conditions with behavioral components have been ruled out. Thorough history, physical and neurological examinations, and laboratory tests are necessary to make a diagnosis of CDS.

### What are the signs of CDS?

**Disorientation** – Wanders aimlessly. Appears lost or confused in house or yard. Gets “stuck” in corners or under/behind furniture. Stares into space or at walls. Has difficulty finding the door (stands at the “hinge side.” Does not recognize familiar people. Does not respond to verbal cues or to name. Appears to “forget” reason for going outside.

**Interaction with family members** – Seeks attention less often. Walks away while being petted. Less enthusiasm upon greeting. No longer greets family members.

**Activity and sleep** – Sleeps more during the day. Sleeps less during the night. Decrease in purposeful activity. Increase in wandering or pacing. Barks at night for no reason.

**Housetraining** – Urinates/defecates indoors. Has accidents indoors soon after being outside. Does not ask to go outside.

While the changes in the brain are progressive and irreversible, medication is available that can help improve some of the signs of CDS. As with Alzheimer's, the sooner a diagnosis is made and medication started the more effective the medication. Anipryl (selegiline hydrochloride, L-deprenyl hydrochloride) is cleared by the FDA to treat dogs with this syndrome. Improvement in a least one sign tends to occur within the first month of treatment and many dogs continue to improve for three months. Each patient responds in his own manner and, since the problem itself is progressive, signs will recur --- even with medication. However, treatment can brighten your dog's senior years and return him to being an interactive member of the family --- often for a significant period of time. Drug interactions can occur so be sure to tell your veterinarian about ALL the medications your dog is taking.