



Cognitive Dysfunction Syndrome (Dog/Cat Dementia)



Cognitive dysfunction is an age-related disease causing degeneration of neurons (nerve pathways) similar to some forms of Dementia/Alzheimer's in people. Research is still looking into the exact changes that occur but studies show that protein deposits and chemicals called anti-oxidants within the brain, as well as reduced blood flow reduce brain function in these animals as they age. It is a common disease in all breeds of elderly dogs and cats although in larger breed dogs it may start earlier in age. It is thought to occur in over 50% of dogs over the age of 11.

What are the signs?

Sometimes the early signs may be subtle and include depression. For example being withdrawn or less keen to play; or anxiety in situations where your pet would not previously have been fearful/stressed. As it progresses signs may include:

- **Asking for food/water/walks repeatedly** as they have short term memory loss and forget that they have recently done these things
- **Confusion recognising people or locations.** This can cause changes in learned behaviours such as toilet training and cause them to pass urine/faeces in the house
- **Changes in normal sleeping pattern** often leading to disrupted nights, howling and crying
- **Lack of interaction with other pets or people.** They can become withdrawn and stop finding enjoyment in the things they previously loved to do
- More severe signs later on in the progression of the disease can include **being wobbly and losing normal co-ordination/balance when walking and losing vision/hearing**

How do we diagnose it?

The first step of diagnosing cognitive dysfunction is that we rule out other conditions that may cause similar signs and are also common in elderly animals. Depending on what we find from your pets medical history and clinical exam in the consultation we may also suggest:

- **Blood tests** to look for anaemia, infection, kidney disease, liver dysfunction, diabetes or hormonal conditions such as Cushings disease and hypo/hyperthyroidism.
- **Urine sample** to look for urinary tract infection, bladder or kidney conditions or Cushings disease
- **X-ray or ultrasound imaging** to look for arthritis of the joints, masses or changes to normal structures within the chest and abdomen

These conditions are important to rule out as they may cause similar signs to cognitive dysfunction such as pain causing disrupted sleep/depression, or increased drinking/urination causing accidents in the house.



What is the prognosis?

The first thing to know is that sadly there is no cure for cognitive dysfunction but there are many things that we can do as vets and owners to improve the signs, slow down the progression and improve our pets quality of lives if they do suffer from this condition.

Some animals will progress slowly over a few years and others more quickly over weeks/months. Management tends to involve a combination of routine/lifestyle control and prescribed medications. In severe cases cognitive dysfunction can progress to a point where your pets' quality of life/welfare is affected so much, that we may need to consider euthanasia (putting them to sleep). This is a difficult decision and our vets are always available to discuss this with you if you feel your pet may be getting to that time.

How can we manage it?

There are many things that you as an owner can do at home to improve the signs and slow down the progression of cognitive dysfunction. These things take time and it may be up to 2 months before you notice an improvement with these changes.

These include:

- **Keeping the layout of your house and garden the same** if possible to avoid confusion, and making sure your pet has easy access to their bed, toilet and food/water bowls
- **Keep a strict routine** where feeding, exercise, playing etc are kept at the same times each day
- **Ensure frequent mental stimulation** in the form of short walks with interesting smells, social interaction, toys and reward based training
- **Feeding your elderly animal a senior diet** – these may have benefits for multiple conditions of ageing animals but will often supplement anti-oxidants which can help with cognitive dysfunction

These things can also be done with older animals that are not necessarily showing signs of cognitive dysfunction to delay the potential onset of this condition.

As well as these lifestyle changes some animals who are struggling with cognitive dysfunction will also need medication. There are multiple medications available that act in different ways to treat the effects of cognitive dysfunction and this can be discussed further with one of our vets in a consultation. It can take time for these medications to be effective so we will often try them for up to 8 weeks before we are able to tell if they are having a positive effect or not.

Our vets will also make sure we investigate/treat any other conditions that your pet may be suffering from that may affect cognitive dysfunction. This may include pain management for arthritis, dental disease and other conditions as mentioned above.

Conclusion

Cognitive dysfunction (Dementia) in elderly dogs and cats can be managed by owners and vets to ensure the best quality of life for our older pets.

Even if you do not feel your pet is suffering with these signs it is a good idea to have regular (at least every 6 months) health checks on elderly animals so we can spot signs of these diseases as early as possible.

Call up to book a consultation with one of our vets to discuss any issues further!

Written by Olivia Little B.V.M B.V.S MRCVS