THE AGING FELINE – CHRONIC KIDNEY DISEASE

KEY POINTS

- Kidney disease is a significant disease in cats
- 1.6 - 20% of cats may be affected by kidney disease in their lifetime
- 31% of cats over age 15 years may be affected by kidney disease
- Cats with kidney disease may show various signs
- Blood and urine tests are important for diagnosis
- It is important to determine the stage of disease
- Staging allows for an individualized care plan
- It is not unexpected for kidney disease to progress

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IS MY CAT SUSCEPTIBLE TO KIDNEY DISEASE?
Kidney disease is an important and significant disease of dogs and cats. Cats are at risk for kidney disease as part of the normal aging process. Additional factors such as breed, diet, concurrent disease, exposure to toxins, and medication history can all play a potential role. Kidney disease may be silent during early stages and progress to chronic disease with time (typically over a few months). Chronic kidney disease (CKD) may affect between 1.6 and 20% of cats in their lifetime, with 31% of cats older than 15 likely affected.

HOW CAN I TELL IF MY CAT HAS KIDNEY DISEASE?
Cats with kidney disease can show a variety of clinical signs such as; drinking more than normal, using the litter box more often, having a reduced appetite, sudden or intermittent vomiting or diarrhea, weight loss, reduced grooming behavior, or lower energy. Signs may be subtle and can be challenging for owners to recognize in early stages. Being familiar with the cats’ daily routine and eating habits may help to identify subtle yet significant changes. Early reporting of clinical signs to the veterinarian may lead to earlier diagnosis and implementation of therapy.
WHAT TESTS CAN BE USED TO DIAGNOSE KIDNEY DISEASE?
Blood and urine tests are an important part of the diagnostic evaluation for kidney disease. Veterinarians typically recommend routine laboratory evaluation as part of general wellness care, especially as cats age. When a veterinarian suspects kidney disease they may recommend comprehensive screening tests to start the diagnostic process (blood chemistry, complete blood count, and urinalysis). Additional blood tests, urine tests, or procedures (such as x-ray, ultrasound, and blood pressure measurement) may be recommended. Blood creatinine, interpreted with urine test results, is an important parameter used to identify kidney disease and to monitor progression over time. Another blood test, called Symmetric dimethylarginine (SDMA), may also be recommended.

WHAT HAPPENS AFTER MY CAT IS DIAGNOSED WITH KIDNEY DISEASE?
After a diagnosis of kidney disease is made it is important to determine the stage of disease. Determining the stage of disease will allow for implementation of a tailored care plan based on the cats’ individual needs. To determine the stage of kidney disease additional tests may be recommended. Staging guidelines have been developed by experts in the field of veterinary kidney disease organized by a group called the International Renal Interest Society (IRIS). Staging is based on repeated measurements of blood creatinine. Additionally, urine concentration and SDMA measurements are also considered. Additional tests will include measurement of blood pressure and urine protein levels. Even with determination of stage, it is not unexpected for kidney disease to progress. However, early detection allows for early initiation of therapies that may result in delayed progression of disease.

WHAT ARE THE STAGES OF CHRONIC KIDNEY DISEASE?
Stage < 1 – Pet is determined to be at risk based on history or other factors, creatinine & SDMA are normal

Stage 1 – Creatinine normal, SDMA normal or slightly elevated; some other abnormality exists suggestive of kidney disease

Stage 2 – Creatinine & SDMA may be near upper level of normal or slightly elevated; symptoms may not be present yet, or if present may be mild

Stage 3 – Creatinine & SDMA are moderately elevated; variety of symptoms may be present

Stage 4 – Increasing symptoms, elevations in lab parameters, severe disease

WHAT OPTIONS EXIST FOR MANAGEMENT OF KIDNEY DISEASE?
Therapy is aimed at modifying or slowing the rate of progression of kidney disease. Increases in any of the measured parameters may be an indication that disease is progressing. The degree of change may indicate how rapidly the disease is progressing, how well the kidneys are functioning, and if additional or modified therapy is indicated. Because clinical signs may vary between cats and with progression of disease, management is multi-modal and modified as needed. Therapy may include dietary changes.
in addition to medications and therapies aimed at improving appetite, controlling nausea, addressing anemia and high blood pressure, reducing blood phosphorus levels, and supporting hydration.

**SUMMARY**
Kidney disease is a significant disease of cats. Early recognition of clinical signs is an important first step in diagnosing this condition. It is important to share information about the cat with the veterinary team, such as changes noted in eating, overall behavior, energy level, or litter box habits. The diagnosis of kidney disease is made based upon history, physical exam, and the results of a comprehensive diagnostic evaluation. While it is not unexpected for kidney disease to progress, therapy is aimed at modifying or slowing the rate of progression of kidney disease and improving clinical signs.
Kidney disease is an important and significant disease of dogs and cats. Cats are at risk for kidney disease as part of the normal aging process. Additional factors such as breed, diet, concurrent disease, exposure to toxins, and medication history can all play a potential role.

**IS MY CAT SUSCEPTIBLE TO KIDNEY DISEASE?**

• Cats with kidney disease may show various signs

1. It is important to determine the stage of disease
2. Blood and urine tests are important for diagnosis
3. Staging allows for an individualized care plan

**KEY POINTS**

• Signs to the veterinarian may lead to earlier diagnosis and implementation of therapy.
• It is not unexpected for kidney disease to progress and eating habits may help to identify subtle yet significant changes. Early reporting of clinical signs to the veterinarian may lead to earlier diagnosis and implementation of therapy.

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- **31% of cats over age 15 years may be affected by kidney disease**
- **Kidney disease is a significant disease in cats**
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**References**