Management of feline chronic kidney disease

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Chronic kidney disease (CKD) is a common diagnosis, especially in elderly cats, and results in shortened lifespan and reduced quality of life due to weight loss, variable/poor appetite, vomiting, polyuria and polydipsia. Management should aim to:

- Identify and treat any underlying disease which is contributing to ongoing renal damage, e.g. pyelonephritis, renal lymphoma
- Where possible, use strategies that are known or thought to slow the progression of renal disease
- Provide supportive and symptomatic treatments to improve quality of life.

The most proven general treatment for CKD is phosphate restriction via feeding a specially designed therapeutic renal diet (TRD). Cats with CKD are vulnerable to phosphate retention, resulting in renal secondary hyperparathyroidism, which worsens clinical status and contributes to further progression of renal disease. Feeding a TRD improves quality and length of life of cats with CKD. Acceptance of a TRD can take several weeks or months to achieve and success depends on supporting carers through this period. If feeding a TRD is not possible, then senior cat food is preferable to standard commercial cat food. Phosphate binders are also useful if a TRD cannot be used, or if the TRD alone is insufficient to control serum phosphate.

The renin–angiotensin–aldosterone system (RAAS) is commonly activated in cats with CKD and may contribute to development of proteinuria, systemic hypertension and progression of renal disease. Use of RAAS-suppressing medication, such as benazepril or telmisartan, is currently recommended in proteinuric cats with CKD and studies have shown an improved quality of life in treated cats. A variety of supportive and symptomatic treatments may be helpful in the individual patient, according to their needs. A successful outcome depends on an individualized approach, which is developed with involvement of

the cat's owner. Monitoring visits are very important to ensure that owners are supported and that clinical problems are identified and treated promptly.

Introducing new concepts and best practice into a busy clinic can be challenging. Getting the team involved in the development of practice-specific clinical guidelines can drive up the standard of medicine at which we practice. Clinical and process audit can then be used to ensure these standards are maintained. Resources on the RCVS Knowledge website provide suggestions and structure as to how this can be implemented.

KEY LEARNING OBJECTIVES

- Prioritize strategies for optimizing length of life in cats with chronic kidney disease (CKD)
- Identify symptomatic therapies which may benefit quality of life
- Design a clinic guideline for managing cats with CKD

MULTIPLE CHOICE QUESTIONS

1. Which of the following strategies is currently thought to have the biggest positive impact on lifespan in a cat with CKD?
(A) Phosphate restriction
(B) Potassium supplementation
(C) Treatment of systemic hypertension
(D) Use of RAAS-suppressing therapies
2. Proteinuria is a marker of RAAS activation. Current guidelines define a cat as proteinuric when their urine protein:creatinine (UPC) is greater than what?
(A) UPC >0.2
(B) UPC >0.4
(C) UPC >0.5
(D) UPC >0.6
3. Up to 60% of cats with CKD may suffer from systemic hypertension. Above what systolic blood pressure (SBP) reading is treatment recommended in cats with no evidence of target organ damage?
(A) SBP persistently above 150 mmHg
(B) SBP persistently above 160 mmHg
(C) SBP persistently above 180 mmHg
(D) SBP persistently above 200 mmHg