Clinical Evidence Report
Evidence for Nutritional Intervention in Early Chronic Kidney Disease in Cats

GENERAL BACKGROUND

Chronic kidney disease (CKD) is a major cause of morbidity and mortality in cats. Nutritional management has been the cornerstone of the long-term management of this condition for many years and has been shown to significantly increase both quality of life and survival. The evidence supporting nutritional management of feline CKD with the nutrition of Hill’s™ Prescription Diet™ k/d™ is stronger than that behind any pharmaceutical intervention.

Recently, IDEXX Laboratories released a new test (IDEXX SDMA™ Test) that allows veterinarians to diagnose CKD earlier than previously possible (i.e., Stage 1). They have demonstrated that cats are diagnosed an average of 17 months earlier using SDMA. With the release of this exciting new diagnostic test the profession now has the opportunity to intervene sooner in the disease process.

EVIDENCE IN STAGE 1 AND 2 FELINE CHRONIC KIDNEY DISEASE

Acceptance and effects of a therapeutic renal food in pet cats with chronic kidney disease

Results:
Markers of Renal Function

Renal Markers Stabilize in at Risk and Stage 1 or 2 Chronic Kidney Disease Cats Feed a Therapeutic Renal Food

- Cats with Stage 1 and 2 CKD consuming a therapeutic renal food had stable serum creatinine and BUN concentrations across time during the 12-month study

Figure 1. Serum creatinine and blood urea nitrogen during a 12-month feeding study. Symbols indicate observed mean values.

IMPLICATIONS FOR PRACTICE

These results suggest that the nutrition of a therapeutic renal food stabilizes markers of renal function in cats at risk and cats with Stage 1 or 2 CKD. Renal values remained stable over the entire 12-month study, suggesting stable renal function. This is important knowing that approximately one-third of healthy, geriatric cats in a recent study progressed to develop azotemia within one year.
SUPPLEMENTARY STUDY INFORMATION

Study Subjects

• 128 client-owned cats at risk for CKD (intermittent signs) or with Stage 1-4 CKD, 70 cats completed the 12-month study

Methods

In a prospective study, pet cats with previously undiagnosed kidney disease (20 IRIS Stage 1, 61 IRIS Stage 2, 14 IRIS Stage 3 and 4, 33 at risk for CKD) were transitioned to a therapeutic renal food. Markers of renal function were measured and owners answered questionnaires about their cat over one year.

Key Conclusions

• 94% of cats with Stage 1-4 CKD successfully transitioned to the therapeutic renal food
• Few changes in markers of renal function were detected in this 12-month study. Serum creatinine and BUN concentrations remained stable in at-risk cats and those with IRIS Stage 1 or 2 CKD.
• In IRIS Stage 3 or 4 cats, mean serum creatinine and BUN concentrations decreased during the first 6 months of the study and then increased during the remaining 6 months, resulting in a significant quadratic trend over time (P=0.002) but no difference between day 0 and month 12
• In cats with CKD, most owner-reported quality of life measures improved during the first six months and then remained stable
• Based on the current study that utilized a therapeutic renal food, Hill’s Pet Nutrition recommends Prescription Diet™ k/d™ Early Support with the nutrition of k/d™ Feline plus more protein, to stabilize or slow disease progression in cats with IRIS Stage 1 CKD

REFERENCES

† IDEXX SDMA trademark is owned by IDEXX Laboratories, Inc. Used by permission
‡ Study foods were Prescription Diet™ k/d™ Canine and Feline, respectively