The Use of Pimobendan in Feline Heart Failure Secondary to Spontaneous Heart Disease

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Pimobendan (Vetmedin®) is an inodilator licensed for the treatment of canine heart failure (HF), but its utility in feline HF has not been reported. Herein, we report the use of pimobendan in 18 cats with HF. 9/18 were female and the mean ± SD age was 8.6 ± 4.8 years. 17/18 cats had congestive HF when pimobendan was initiated. 1 cat had signs consistent with forward HF and later developed congestive HF. Most cats demonstrated myocardial failure on echocardiogram and were not stable on conventional HF therapy at the time of pimobendan initiation.

HF etiology was dilated cardiomyopathy (6/18), unclassified cardiomyopathy (5/18), arrhythmogenic right ventricular cardiomyopathy (4/18), congenital heart disease (2/18) and aortic endocarditis (1/18). Concurrent medications at the time of P initiation included furosemide (17/18 cats), an angiotensin converting enzyme inhibitor (16/18 cats), spironolactone (8/18 cats), clopidogrel (8/18 cats) and atenolol (2/18 cats). The pimobendan dose used was 0.23 +/- 0.07 (range 0.08-0.38) mg/kg PO q 12 hours. The median Kaplan Meier estimated survival time in cats after initiation of pimobendan was 250 days (inter-quartile range 30-342, absolute range 1-422). Following initiation of pimobendan the median time to the first recheck was 30 days (inter-quartile range 22-51, absolute range 1-167). At this time there was no statistically significant change in systolic blood pressure (Pre = median 107 mmHg, Post = median 119 mm Hg) left ventricular fractional shortening (Pre = 21.4%, Post = 24.0%), left atrial to aortic ratio by M-mode (Pre = 2.3, Post = 2.3), packed cell volume (Pre = 36%, Post = 31%), creatinine (Pre = 2.0 mg/dl, Post = 1.9 mg/dl) and alanine aminotransferase (Pre = 96 U/l, Post = 71 U/l). Pimobendan was safe, well tolerated, appeared to improve clinical signs and may have improved survival in this refractory feline HF cohort. The only complication was worsening hypotension in 1 cat with mitral valve dysplasia and left ventricular outflow tract obstruction (LVOTO). Thus, LVOTO should be considered a relative contraindication to the use of P in cats with HF.

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