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Dogs diagnosed with megaoesophagus between 01/01/97 and 01/10/07 were identified from clinical databases at Glasgow University Veterinary School and reviewed. Cases without visible oesophageal dilation, clinical signs of dysphagia or where oesophageal dilation was only identified under general anaesthesia were excluded. AP was defined radiographically as the presence of an alveolar pattern or consolidation of ventral lung lobes. Data collected included signalment, historical, clinical, laboratory and radiographic findings, date and cause of death. Owners and referring veterinarians were contacted for follow-up data. Categorical data was analysed using either Fisher exact or Chi Square tests. Continuous data was analysed using Wilcoxon rank sum tests.

Eighty-nine cases fulfilled the inclusion criteria, of which 34 (38%) had AP at the time of diagnosis. Cases with AP were less likely to; be lighter (P = 0.02), have segmental oesophageal dilation (P = 0.04), have hyperglycemia (P = 0.026), or to survive to discharge (P = 0.004) than those without AP. AP was associated with abnormal lower respiratory tract noise (P = 0.03), higher median total white blood cell counts (P = 0.008) and median segmented neutrophil counts (P = 0.003).

At the time of censorship, 29/34 (85%) of cases with AP were dead. Amongst the dogs that died, 15/29 (52%) were euthanased because of AP. Ten of these cases died or were euthanased before discharge. Dogs that died of AP were more likely to have had oxygen therapy (P = 0.007), been in the intensive care unit (P = 0.007) or had antibiotics prior to diagnosis (P = 0.02). Presence of lung lobe consolidation and extent of the radiographic changes were not found to be significant.

This study suggests that smaller patients, and those with segmental oesophageal dilation (e.g. vascular ring anomalies) may have a reduced risk of developing AP. In a population of dogs with megoesophagus, the presence of AP adversely affected short term survival, however 50% of patients with AP did survive to discharge. These are likely to be the less severely affected patients that do not require intensive care and oxygen therapy.

MICROALBUMINURIA AS A RISK FACTOR IN DOGS WITH CARDIOVASCULAR DISORDERS

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Increased albumin excretion is often a concomitant of several unfavorable metabolic and nonmetabolic risk factors that indicates the presence of subclinical organ damage at the renal and cardiac level. Because of unique ability to reflect many clinically relevant abnormalities, microalbuminuria (MA) is currently considered as a marker of cardiovascular risk in human medicine. The present study was therefore initiated in an attempt to clarify the relationship between blood pressure, urine protein/creatinine ratio (UPC) and MA in dogs with cardiovascular disorders (CVD).

Totally 40 dogs with different complaints such as coughing, weakness, exercise intolerance referred to Department of Internal Medicine, Faculty of Veterinary Medicine, Istanbul University were included in this study. The ages varied between 2 and 18 years. Microalbuminuria (E.R.D. Health Screen Test), electrocardiography (ECG), echocardiography, UPC and blood pressure measurement (HDO) levels were detected in every patient. Serum BUN, creatinine, glucose, LDH, CK, K and urine analyses were also assessed.

CVDs were determined as mitral valve disease (n = 20), dilated cardiomyopathy (n =12), myocarditis (n = 2), tricuspid valve disease (n = 3), aortic stenosis (n = 1), ventricular septal defect (n = 1) and hypertrophic cardiomyopathy (n = 1). Twenty three of 40 had also diabetes mellitus (n = 3), lower urinary tract disease (n = 13) and chronic renal failure (n = 4), epilepsy (n = 2) and bronchitis (n = 1). MA was detected as positively in 29 dogs with different levels. Seventeen of these dogs with only CVDs had positive results for MA.

When MA (+) and MA (-) groups compared, urine specific gravity was increased ($p<0.05$) and urine creatinine was decreased significantly ($p<0.01$) in MA (+) dogs, statistically. Serum BUN and Creatinine had a positive correlation with UPC at the level of $p<0.01$, statistically. Although there was a positive correlation between urine protein and urine creatinine, negative correlation was detected between UPC and urine creatinine. There were also positive correlations between LDH and CK ($p<0.01$), CK and diastolic blood pressure (DBP) ($p<0.01$), CK and UPC ($p<0.01$), systolic blood pressure (SBP) and DBP ($p<0.01$).

It is emphasized that microalbuminuria has been shown as a new marker to predict the risk of cardiovascular disorders in dogs.