Oral presentations

Early detection of kidney disease in dogs: a comparison of serum SDMA and creatinine versus GFR measured by iohexol clearance

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OBJECTIVES
This study evaluates symmetrical dimethylarginine (SDMA), as an alternative marker of reduced GFR, compared to serum creatinine (sCr), in a clinically representative population of dogs with suspected chronic kidney disease (CKD).

METHODS
This prospective study included 62 dogs suspected of having CKD based on clinical findings but with SCr within the laboratory reference range. Each dog had SCr, SDMA and GFR (iohexol clearance) measured concomitantly. The dogs were stratified in four weight quartiles (Bexfield et al. 2008) and the individual relative GFR deviation compared to the average GFR of the relevant weight quartile (%GFR) was calculated. Correlation between SCr or SDMA and %GFR were evaluated and the coefficient of determination (R²) calculated.

RESULTS
Forty-three dogs had a GFR below the mean of their weight quartile. Nine were >40%, 8 were 30–40%, 7 were 20–30%, 19 were <20% below mean GFR. SCr and SDMA were inversely correlated with %GFR: the relationship was stronger for creatinine (R²=0.51) than SDMA (R²=0.38). SDMA and SCr were elevated in 6/19 (32%) and 0/19 dogs with normal/increased GFR respectively. SDMA and SCr performances are summarised below:

<table>
<thead>
<tr>
<th>SDMA &gt;14 µg/dL</th>
<th>SCr &gt;125 µmol/L</th>
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</thead>
<tbody>
<tr>
<td>Sensitivity</td>
<td>72.0% 25.6%</td>
</tr>
<tr>
<td>Specificity</td>
<td>68.4% 100%</td>
</tr>
<tr>
<td>Positive predictive value</td>
<td>83.7% 100%</td>
</tr>
<tr>
<td>Negative predictive value</td>
<td>52.0% 37.2%</td>
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STATEMENT
SDMA was more sensitive than creatinine for detection of early decreases in GFR but generated falsely positive results in 32% of the cases. Longitudinal studies are warranted to determine the predictive value of reduced GFR patients in determining the occurrence of clinical CKD and survival in these patients.

Breed, age and gender distribution of feline hepatobiliary disease in the United Kingdom

Will Bayton¹, Charlotte Westgarth¹, Tim Scase², David Price³, Nick Bexfield¹

OBJECTIVES
Feline hepatobiliary disease is common, however no data exists to determine which diseases occur in the UK, nor if there are breed, age and gender associations. The first objective is therefore to determine the relative frequency of different feline hepatobiliary diseases in the UK. A second objective is to identify which breeds have an...