RESULTS

Fifty dogs were recruited to the study and 47 were eligible for inclusion; 32 females and 15 males. Type A ureters were identified bilaterally in 73% males and 64% females. Ectopic ureters (type C) were identified in 2 males (13%) and 2 females (6%). The overall prevalence of ureteral ectopia in these clinically normal dogs was 8.5%.

STATEMENT (CONCLUSIONS)

Ectopic ureters may be present in normal Golden retrievers, with no clinical signs of urinary incontinence. This may have significant implications for breeding and the incidence of 'wet puppies' born, requiring treatment or euthanasia.

Analytical performance of catalyst SDMA test for measurement of symmetric dimethylarginine (SDMA) in serum from dogs

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OBJECTIVES

IDEXX Laboratories, Inc. has introduced a novel immunoassay to measure of symmetric dimethylarginine (SDMA) in-clinic: Catalyst® SDMA Test (CatalystSDMA). 1. Method comparison of CatalystSDMA to a reference method (RefSDMA): liquid chromatography-mass spectrometry. 2. Compare clinical interpretation based on current guidelines.

METHODS

1. Serum samples from 105 dogs, including a mixture of healthy animals and patients with kidney disease, were analyzed once with CatalystSDMA (using an IDEXX Catalyst Dx® Chemistry Analyzer) and once with RefSDMA. A correlation plot was constructed with Passing-Bablok Regression analysis. 2. For each assay, results (to the nearest whole number) were assigned to one of three categories: ≤ 14 $\mu\text{g/dL}$; 15 to 19 $\mu\text{g/dL}$; ≥ 20 $\mu\text{g/dL}$. The percentage agreement between the two assays was calculated. For the discordant samples, the distribution of the absolute differences between results was determined.

RESULTS

1. $r=0.98$, slope=1.01 [95% CI 0.97–1.04], intercept =0.52 $\mu\text{g/dL}$ [95% CI –0.25–1.03], mean bias=–0.44 $\mu\text{g/dL}$ [95% CI –1.09 to 0.20]; in the range 10 to 25 $\mu\text{g/dL}$ by RefSDMA, the mean bias was 0.28 $\mu\text{g/dL}$. 2. For 100 (95%) of the 105 samples, the methods were concordant. For the discordant samples, the median absolute difference was 2 $\mu\text{g/dL}$ [range 2 to 8 $\mu\text{g/dL}$].

STATEMENT (CONCLUSIONS)

The excellent correlation, minimal bias and strong concordance with the reference method provide confidence that the veterinary practitioner can utilize CatalystSDMA for in-clinic measurement of canine SDMA.