4.2–19.2; $p=0.009$) and fructosamine ($377 \mu\text{mol/l}$; range 256–575, $p=0.035$). Of six cats with a Caninsulin-duration of action ≤ 10 hours, five showed a ProZinc-duration of action >10 hours.

DISCUSSION

It appears effective and safe to transition Caninsulin-treated diabetic cats onto ProZinc using a starting dose of 0.2–0.7 unit/kg BID, with a positive impact on clinical signs and glycaemic parameters in all cats in the study.

Assessment of novel methods of monitoring trilostane treatment of canine hyperadrenocorticism

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AIM

To investigate alternative methods to ACTH stimulation tests to monitor trilostane treatment.

METHOD

Cases of hyperadrenocorticism that been treated with a consistent dose of trilostane for at least 30 days were recruited from first opinion and referral practices. Cortisol was measured at 3 time points in each dog; pre-trilostane, 3 hours post-trilostane and 1 hour post-ACTH injection. Clinical control was assessed using an independently-scored owner questionnaire. Dogs that had an increase in cortisol after trilostane administration were excluded. The Pearson correlation coefficient was calculated to assess relationships between the cortisol measurements and the absolute clinical score.

The clinical scores derived from the owner questionnaire were then categorised into one of four groups: over-controlled, well-controlled, moderately-controlled and poorly-controlled. A scoring system was developed for each of the 3 cortisol measurements. A fourth scoring system was developed using a novel algorithm that combined the pre and post trilostane cortisol (pre-post). The results of each of these 4

scoring systems categorised the dogs into those that would be expected to be over-controlled, well-controlled, moderately-controlled and poorly-controlled. Weighted Kappa was calculated to assess the agreement between the categorisation according to each of the 4 methods compared to the categorisation using the owners score.

RESULTS

In total 70 tests were analysed. One test did not have a post ACTH cortisol. There were significant but weak correlations between the absolute clinical scores and all the cortisol concentrations. When compared to the results of the owner's questionnaire 39, 33, 19 and 16 dogs were correctly categorised using the pre-post, pre alone, post-ACTH and post trilostane cortisol respectively. Amongst the miscategorised results 27, 35, 40 and 42 dogs were incorrect by 1 category and 4, 2, 10 and 12 dogs by 2 categories respectively. All methods correctly recognised the over-controlled dog that had been identified by the owner's score.

The weighted kappas for post-ACTH and post trilostane cortisol categories compared to the owner score categories were 0.16 and 0.27 respectively (defined as fair agreement). In contrast the weighted kappas for the pre trilostane and pre-post trilostane categories were 0.48 and 0.44 respectively (defined as moderate agreement).

CONCLUSIONS

The novel methods of pre-trilostane and pre-post trilostane better reflected the clinical control of hyperadrenocorticism as determined by the owners' questionnaire and should be further investigated as monitoring tools for trilostane.