ill controls ($P<0.0001$), anaemic dogs with inflammatory bowel disease ($P=0.0056$) and to anaemic dogs with iron-deficiency ($P=0.0011$). No differences were observed between anaemic dogs with inflammatory bowel disease, iron-deficiency anaemia and ill controls.

STATEMENT

This study did not support the hypothesis that iron deficiency anaemia increases whole blood manganese concentrations. Further research is warranted to understand the influence of anaemia on whole blood manganese.

Effect of brachycephalic conformation on haematocrit

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OBJECTIVES

To determine if brachycephalic conformation results in chronic systemic hypoxia leading to appropriate secondary absolute erythrocytosis as a compensatory mechanism.

METHODS

Retrospective study carried out from November 2014 to October 2015. There were 72 brachycephalic dogs (group B). In group B, 6 individuals underwent brachycephalic obstructive airway syndrome (BOAS) surgery. There was a control population (group N) that comprised

44 normocephalic dogs. Information on sex, breed, neuter status, body weight and diagnosis was obtained from medical records. Only individuals between 6 months and 4 years with a haematocrit (hct) performed at the small animal teaching hospital were included in this study. Patients with relative erythrocytosis, a known cause of absolute erythrocytosis such as primary erythrocytosis, cardiorespiratory disease and renal tumours or patients undergoing chemotherapy were excluded from the study.

RESULTS

In group B the overall hct was 46.5% and 46.1% in the group N. Among the group B, multiple regression showed that brachycephalic dogs that underwent BOAS surgery had a significantly higher hct ($p=0.03$) compared to the rest of the dogs. No statistically significant differences were found among the categories of age, sex and neuter status in comparison to the hct. Nonetheless, age had a significant influence in the model.

STATEMENT

This study shows that breeds with extreme brachycephalic features that required BOAS surgery had higher hct values and therefore reference ranges should be review and tailored to these individuals.

Evaluation of a point-of-care coagulation analyser in dogs by comparison with central diagnostic laboratory methods

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OBJECTIVES

To compare measurements of prothrombin time (PT) and activated partial thromboplastin time (aPTT) using a point-of-care coagulation analyser (PCCA) with PT and

kaolin-cephalin clotting time (KCCT) (which is similar to an APTT) measured in a central laboratory.

METHODS

Surplus blood was obtained from 57 dogs that presented for diverse reasons. PT and APTT were measured immediately after sampling on the PCCA using a drop of whole blood. PT and KCCT were measured on a citrated whole blood sample concurrently submitted to the lab. Reproducibility of the PCCA was assessed by running three identical PCCA's simultaneously on 5 different samples.

RESULTS

PT could not be measured in one sample on the PCCA. There were significant correlations between the PT and APTT/KCCT results from the 2 methods. However there was only moderate agreement between the analysers (kappa for PT was 0.57 and for APTT/KCCT was 0.51) in classifying the samples as abnormal or normal using supplied reference ranges.

Oral presentations

Most of the samples were assessed as being normal on both analysers. There were 5 samples that had an abnormal PT on both analysers, but there was disagreement on a further 6 samples. There were 8 samples that had an abnormal APTT or KCCT on both analysers, but there was disagreement on 10 samples. The reproducibility of the PCAA was excellent with

median co-efficient of variation of 6.6% for PT and 1.8% for APTT.

STATEMENT

The reproducibility of the PCCA is encouraging but the results can vary from established laboratory methods.

Antibiotic selection in canine haemorrhagic gastroenteritis: first results of a randomized blinded clinical trial

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OBJECTIVES

Antibiosis is deemed appropriate in haemorrhagic gastroenteritis (HGE) cases with systemic signs of disease, but there are no clear recommendations on which antibiotics should be administered. Amoxicillin-clavulanate and metronidazole are the most commonly prescribed antibiotics for such cases, but the necessity for both antibiotics is unknown. A clinical trial was therefore designed to investigate the efficacy of metronidazole as an adjunct to amoxicillin-clavulanate therapy in HGE cases.

METHODS

Dogs presenting to a first opinion veterinary hospital with HGE <3d duration were recruited to a ethically approved, prospective, randomized, blinded treatment trial with owner consent. Cases were randomised to receive either metronidazole or saline in a blinded manner, in addition to standard supportive therapy consisting of amoxicillin-clavulanate, IVFT, buprenorphine and omeprazole. Treatment efficacy was assessed by duration of hospitalisation, and daily clinical progress measured by a clinical scoring system.

RESULTS

Twenty-one cases have successfully completed this trial to date, which is 44% of the total required to be able to detect >12hr difference in hospitalisation between the treatment groups (5% error rate and 80% power). The average duration of hospitalisation for dogs receiving metronidazole was 28.6hr (SD 17.9hr), and saline placebo was 24.3hr (SD 10.9hr). Statistical significance was not reached. There was also no significant difference between daily clinical scores of the two treatment groups.

IMPACT

The interim results of this study have shown that it is not necessary for both metronidazole and amoxicillin-clavulanate to be administered to severe HGE cases, as addition of metronidazole does not improve clinical outcome.

Borrelia burgdorferi sensu lato infections in ticks from dogs in Cumbria

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OBJECTIVES

To understand the infection prevalence of *Borrelia burgdorferi sensu lato* (s.l.), the causative agent of Lyme disease, in dogs in Cumbria.

METHODS

Nine veterinary practices in Cumbria collect ticks from animals that were brought in specifically for tick removal or if a tick was spotted during an appointment. The animals were subjected to a two minute examination, focused on ears, head and groin. Ticks were removed into 70% ethanol, and a questionnaire filled out for each animal. The ticks were identified to species using a dissecting microscope and appropriate taxonomic keys. DNA was extracted and the samples were tested for the presence of *Borrelia burgdorferi* s.l. DNA using a real-time PCR targeting the 5s-23s intergenic spacer region.

RESULTS

393 ticks have been collected from 246 animals. Most ticks were collected off dogs, but a not inconsiderable number were collected off other animals. *Borrelia burgdorferi* s.l. DNA was detected in eight ticks (2.03%).