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

Diogo Neves, Alex German, Kevin Murtagh

Small Animal Teaching Hospital/University of Liverpool, Liverpool, UK

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

Margaux Kuijlaars, Ian Ramsey

University of Glasgow, Glasgow, UK

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.