monocyte concentrations in German Shepherds (mean=0.82, sd=0.21, $p<0.01$) and Rottweilers (mean=0.83, sd=0.23, $p<0.01$), which were significantly elevated above upper reference. Significantly higher average lymphocyte concentrations in Golden Retrievers (mean=3.82, sd=0.08, $P<0.001$), lower average monocyte concentrations in Dobermanns (mean=0.59, sd=0.21, $P<0.001$), and higher average eosinophil concentrations

in Rottweilers (mean=1.22, sd=0.10, $P<0.001$) were seen compared to crossbreeds averages.

STATEMENT (CONCLUSIONS)

In the future more specific reference intervals should be considered encompassing age and breed related WBC variation.

Management of canine immune-mediated haemolytic anemia: a survey of primary practitioners and specialists in the United Kingdom

**Sarah Tayler¹, James Swann²,
Barbara Skelly³, Barbara Glanemann¹**

- 1 Department of Clinical Science and Services, RVC, University of London AL9 7TA, London, United Kingdom
- 2 Kennedy Institute of Rheumatology, University of Oxford, Roosevelt Drive, Oxford, OX3 7FY, Oxford, United Kingdom
- 3 Department of Veterinary Medicine, University of Cambridge, Madingley Road, Cambridge CB3 0ES, Cambridge, United Kingdom

OBJECTIVES

Immune mediated haemolytic anaemia (IMHA) in dogs is challenging to manage, with no current consensus within the veterinary profession on best treatment. This study aimed to explore the diagnostic and therapeutic decisions that veterinary surgeons are currently taking when treating dogs with IMHA using an online questionnaire.

METHODS

The survey was created using the online survey provider 'Survey Monkey', with a combination of multiple choice and free text questions. It was distributed to veterinarians throughout the UK via email using the RCVS 'find a vet' database, the Royal Veterinary College continuing professional development database, and social media. Data were collected and descriptive statistics performed.

RESULTS

A total of 247 respondents participated in the survey, including first opinion practitioners (89.1%) and internal medicine or emergency and critical care diploma holders (10.9%). Most respondents (94%) identified glucocorticoids as their drug of first choice, with starting doses ranging from 1–5 mg/kg/day. Among respondents, 65.9% indicated that they use combination immunosuppressive therapy, with 43% using more than 1 drug from the point of diagnosis. The most commonly used agents alongside glucocorticoids were azathioprine (76.4%) and ciclosporin (56.5%). Prophylactic anti-thrombotic therapy was not used commonly, with 46.7% of respondents indicating they do not use anti-thrombotics at all.

STATEMENT (CONCLUSIONS)

The results of this survey highlight the wide variety of treatment strategies currently being used to manage IMHA in dogs, and the need to further disseminate up-to-date knowledge based on existing evidence regarding the management of canine IMHA to better guide us when treating this disease.

Prevalence and disease associations in feline thrombocytopenia: a retrospective study of 194 cats

**Ariadna Ribas Latre¹, Rachel Miller¹,
Rory Bell², Darren Barnes¹, Jenny Ellis¹**

- 1 Dick White Referrals, Six Mile Bottom, United Kingdom
- 2 Wear Referrals, Bradbury, United Kingdom

OBJECTIVES

This study is a retrospective evaluation of thrombocytopenic cats assessing the prevalence of thrombocytopenia, diseases most commonly associated with thrombocytopenia and association with retroviral infection.

METHODS

Laboratory records from September 2008 to January 2017 were reviewed. Haematology reports were eligible if the automated platelet count was $<200 \times 10^9/l$ and was

Oral presentations

confirmed on blood film evaluation. Cats with a normal platelet count were selected for comparison. Cats were categorized for data analysis based on final diagnosis and mechanism of thrombocytopenia.

RESULTS

Of 3288 cats presented to the hospital, 194 (5.9%) were thrombocytopenic; which is greater than previously reported (1.2%). Disease processes associated with thrombocytopenia were haematological disease (15%; $P<0.0001$), infectious disease (15%; $P<0.0001$) and neoplasia (13%; $P=0.5314$). Primary immune-mediated thrombocytopenia was uncommon (3%); and it was associated with a significantly lower platelet count ($19 \times 10^9/L$; $P<0.0001$) than other disease groups. Severe thrombocytopenia (ST), defined as a

platelet count $<50 \times 10^9/L$ ($n=49$), was significantly more likely to be associated with haematological disease than all other disease processes combined ($P=0.0051$). Twenty nine percent of ST cats had bone marrow disease and 16% had primary immune mediated thrombocytopenia. Ten of the 93 cats tested were FeLV positive (11%).

STATEMENT (CONCLUSIONS)

The prevalence of feline thrombocytopenia was higher than previously reported. FeLV was less commonly associated with thrombocytopenia in this study compared to an older study (30% prevalence of infection). Cats with primary immune-mediated thrombocytopenia had a significantly lower platelet count but this appeared to be an uncommon cause of ST.

Gallbladder mucocoele in Border terriers – a new breed predisposition?

Lucy Barker, Mickey Tivers, Victoria Black, Aarti Kathrani

University of Bristol, Bristol, United Kingdom

OBJECTIVES

Gall bladder mucocoele is an increasing cause of canine biliary disease and we have anecdotally noted a higher incidence in the Border terrier at our hospital. Therefore, this study aimed to determine whether this breed is predisposed to gall bladder mucocoele.

METHODS

A retrospective review of the medical records from our hospital between January 2011 and August 2017 was performed to identify dogs with ultrasonographically confirmed gall bladder mucocoele. Information reviewed included

signalment, laboratory results, histopathology, gall bladder rupture status, short-term mortality (survival to discharge) and survival at long-term follow-up (via contact with referring veterinary practice). An odds Ratio was performed to evaluate the predisposition of Border terriers to gall bladder mucocoele compared to non-Border terrier breeds.

RESULTS

Thirty-three dogs were diagnosed with gall bladder mucocoele during the study period, including 15 Border terriers (45.5%). Diagnosis was made on ultrasound alone (13), or ultrasound and histopathology (21). Cholecystectomy was performed in 23/33 dogs (69.7%). Twelve out of 15 (80%) Border terriers survived to discharge, compared to 12/18 (66%) of non-Border terriers. All surviving Border terriers were alive at a median follow-up of 637 days (155–1077). Fifteen of 208 Border terriers had gall bladder mucocoele compared to 18/2447 non-Border terriers. Border terriers were predisposed with an odds ratio of 95.5 (95% confidence interval 47.42–192.22).

STATEMENT (CONCLUSIONS)

In our hospital Border terriers were predisposed to gall bladder mucocoele and their short and long-term outcome was good. This study forms part of collaborative investigations into predisposition and aetiology of gall bladder mucocoele in Border terriers.