A comparison of survival for Granulomatous Meningoencephalomyelitis (GME) following treatment with either Cytosine Arabinoside or Lomustine in combination with corticosteroids in dogs

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OBJECTIVES
To compare survival for Granulomatous Meningoencephalomyelitis (GME) in dogs following treatment with corticosteroids in combination with either Cytosine Arabinoside or Lomustine

STATEMENT
We have identified three proteins involved in neural function that might play a role in OEC transplant efficacy. Further work is needed to validate these preliminary findings but this suggests that genetically modifying OECs to over-express these proteins could enhance their efficacy.

METHODS
A retrospective analysis was undertaken of cases of GME treated in 2 clinics between 2009 and 2015 with either cytosine arabinoside and prednisolone combination therapy or lomustine and dexamethasone combination therapy. Diagnosis of GME was made on a combination of focal or multifocal neurological signs with MRI lesions consistent with GME or cerebrospinal fluid changes of pleocytosis or increased protein. Initial therapy was either with Cytosine arabinoside 200mg/m² divided over 48 hours, repeated once after 3 weeks or lomustine 60–80 mg/m² single dose. In cases of recurrence, a further dose of the initial drug was used. Kaplan Meier survival analysis was performed.

RESULTS
71 cases were treated with cytosine arabinoside and 92 with lomustine. Kaplan Meier analysis showed a similar trend for both cohorts except in the period of day 100–600, where the lomustine treatment protocol has a lower survival percentage than the cytosine arabinoside protocol. There was no statistical significance between the survival data using log rank tests. In both cohorts the number of surviving patients was greater than the number of fatalities. Median survival rate for cytosine arabinoside treated cases was 1349 days and Lomustine remained undefined as 50% of the patients were still alive at the end point of the study.

STATEMENT
The clinical outcome was not different between the two treatment protocols and longer than those in the published literature for cytosine arabinoside.

Drug compliance in canine epilepsy

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OBJECTIVES
Inadequate compliance has been identified in human medicine as a major cause of treatment failure and increased seizure frequency. The aim of this study was to find the level of owner compliance in treatment of canine epilepsy patients and to identify factors that could lead to reduced compliance.

METHODS
Ninety-four cases were obtained from three first opinion, small animal practices in the UK. For inclusion in the
study, cases had to have been prescribed at least three repeat anti-epileptic drug prescriptions at the point of data collection. To assess the level of owner compliance, tablets were counted for each prescription to determine if the patient had a sufficient number to cover the period of time between prescriptions. A Mann-Whitney U-test was used for statistical comparisons and a p-value of <0.05 was deemed significant.

RESULTS
Median compliance of the ninety-four cases was 57%. There was no significant difference found between insured and non-insured patients or whether the patient was receiving either one or multiple tablets or doses per day. Patients that were receiving two or more different anti-epileptic drugs (AEDs) were found to have a higher compliance rate than patients receiving only one AED (P=0.04).

CONCLUSION
More than half of owners of canine epilepsy patients are not fully compliant. Owners of dogs needing multiple AEDs have a higher compliance. A low compliance rate could impact on the success of AEDs so awareness needs to be raised to veterinarians to help improve compliance in their clients.

Do biomechanical differences exist between neurologically normal French Bulldogs with and without spinal kyphosis?

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OBJECTIVES
Compare temporal-spatial gait analysis variables in neurologically normal French Bulldogs with and without spinal kyphosis.

METHODS
French Bulldogs which presented to a dedicated Brachycephalic Clinic were prospectively enrolled. Included dogs underwent general physical, orthopaedic, and neurological examination. The presence of spinal kyphosis was evaluated by computed tomography and spinal kyphosis was defined as a modified Cobb angle exceeding 10°. Temporal-spatial gait variables were collected with a pressure-sensitive, portable (Gait4dog) walkway and data analysed using Gait4 software. Patients were walked until three valid trials were attained within 30 minutes. A trial was considered valid when the dog walked straight ahead, at an even pace, with the head centered straight forward. Univariate analysis was performed to identify variables which could be taken forward into a generalised estimating equation.

RESULTS
Eighteen French bulldogs with (n=10) or without kyphosis (n=8) were included. Three gait variables were statistically significant between the two groups. Mean pressure in the left thoracic limb was greater in dogs without kyphosis (p=0.007), reach in the left pelvic limb was greater in dogs with kyphosis (<0.001), and total pressure index was greater in the right thoracic limb of dogs with kyphosis (p=0.003).

STATEMENT
Although spinal kyphosis is only rarely associated with neurological deficits, it appears to be associated with biomechanical alterations and subtle gait abnormalities. Further studies are needed to evaluate the clinical importance of altered temporal-spatial gait variables and biomechanics in French Bulldogs with spinal kyphosis.