Prevalence of toxoplamosis and neosporosis in dogs diagnosed with meningoencephalitis of unknown origin

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OBJECTIVES
Meningoencephalitis of unknown origin (MUO) is an inflammatory non-infectious disorder affecting dogs. Clinical signs are non-patognomonic. To achieve a diagnosis in-vivo without histopathological confirmation, further investigations are necessary including MRI, CSF analysis, and PCR/serology for infectious diseases. About one third of affected dogs may die within the first 72h following admission. This may suggest that more aggressive initial therapy is required and that exclusion of infectious aetiologies may not be possible. Therefore, the aim of the study was to assess the prevalence of Toxoplasma and Neospora in the UK providing evidence based data to balance the risks/benefits of treating a dog suffering from suspected MUO with immunosuppressive drugs in an emergency situation.

METHODS
The medical records of two referral centres were reviewed retrospectively to identify a cohort of dogs diagnosed and treated for MUO. Inclusion criteria included: clinical signs suggestive of forebrain/brainstem/cerebellum (or any combination) localisation; Magnetic resonance imaging of the brain (inclusive of normal/focal/multifocal lesions findings); CSF analysis with evidence of inflammatory disease and infectious disorder testing (toxoplasmosis/neosporosis). Descriptive statistics was performed.

RESULTS
A population of 181 dogs was identified. Mean age was 61 months. Fifty six percent were males. Localization was multifocal in 76% of the cases. Multifocal lesions were identified on MRI in 45% of cases. CSF analysis was abnormal in 70% of the cases. Neospora was diagnosed in two dogs (prevalence: 1%) and no dogs were identified with Toxoplasmosis.

STATEMENT
This study reveals that the risk associated with starting immunosuppressive medication in patients suspected of MUO is very low.

Comparison between hemilaminectomy with anulectomy or hemilaminectomy with partial discectomy for the surgical management of thoracolumbar anulus fibrosis protrusion in dogs

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OBJECTIVE
To compare the clinical outcome of dogs undergoing a hemilaminectomy with anulectomy or a hemilaminectomy with partial discectomy for treatment of thoracolumbar intervertebral disc protrusion (IVDP).

METHODS
Medical records from 2006 to 2015 were reviewed. Dogs were included if they had clinical signs and imaging findings consistent with thoracolumbar IVDP and had undergone surgical treatment with a hemilaminectomy with anulectomy or hemilaminectomy with partial discectomy. Outcome data was obtained by accessing medical files, veterinary records and conducting owner questionnaires. Variables compared between the two treatment groups included age, sex, body weight, duration of clinical signs, presence and severity of neurological deficits, MRI findings (number of IVDPs and presence of intraparenchymal/intramedullary signal intensity changes), surgical time, perioperative complications, postoperative neurological deterioration and recurrence of clinical signs.