Prevalence of toxoplasmosis 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.

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RESULTS

The two treatment groups showed no significant differences in signalment, clinical presentation and imaging findings. Significantly fewer dogs undergoing a hemilaminectomy with partial discectomy showed an early postoperative neurological deterioration ($p=0.037$) and recurrence of clinical signs of thoracolumbar IVDP within 18 months of initial presentation ($p=0.019$) compared with dogs undergoing a hemilaminectomy with anulectomy.

CLINICAL SIGNIFICANCE

Hemilaminectomy with partial discectomy for decompression of thoracolumbar IVDP is associated with a reduced rate of postoperative neurological deterioration as well as a reduced rate of recurrence of clinical signs compared to hemilaminectomy with anulectomy.

FUNDING/DECLARATIONS OF INTEREST

None.

Results of oral prednisolone administration or ventriculoperitoneal shunt placement in dogs with congenital hydrocephalus

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OBJECTIVES

Little is known about the role of non-surgical treatment for dogs with congenital hydrocephalus. The aims of this study were to evaluate prednisolone administration or ventriculoperitoneal shunt placement for dogs with congenital hydrocephalus.

METHODS

Retrospective review of medical files (January 2005–January 2015) for dogs with congenital hydrocephalus.

Patients were categorized as undergoing either surgical treatment consisting of ventriculoperitoneal shunt placement ($n=29$) or medical treatment consisting of oral prednisolone administration ($n=13$). Follow up information was obtained from owners and referring veterinarians. Clinical findings at the time of diagnosis, short term and long term outcome were recorded.

RESULTS

Dogs treated surgically or medically did not differ in signalment, duration and type of clinical signs, presence of neurological deficits, or insurance status. Median follow-up for surgically treated dogs was 436 days and 303 days for medically treated dogs. Of the surgically treated dogs, 15/25 (60%) improved with 11/25 (44%) being considered neurologically normal. Of the medically treated dogs, 5/12 (41.6%) improved with 4/12 (33.3%) being considered neurologically normal. Deterioration in neurological signs resulted in euthanasia of 9/29 (31%) surgically treated and 4/13 (30.7%) medically treated dogs. Within one year of treatment, 3/13 medically treated dogs had switched to surgical treatment due to deterioration. No statistical differences were seen in any of the evaluated outcome measures.

STATEMENT

Although ventriculoperitoneal shunt placement is typically considered the treatment of choice for dogs with congenital hydrocephalus, the results of this study suggest that medical management can be associated with satisfactory outcomes in selected cases.

Myoclonus in older Cavalier King Charles spaniels

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OBJECTIVES

To increase awareness of a myoclonic epilepsy in Cavalier King Charles spaniels (CKCS).

METHODS

Medical records were searched for CKCS observed to have myoclonic jerks.

RESULTS

14 dogs were identified (9 female). Dogs had similar episodes described as rapid eyelid blinking with head