Oral presentations

Vestibular disease in dogs under UK primary veterinary care: epidemiology and clinical management

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OBJECTIVES

Vestibular disease, central and/or peripheral, can be a dramatic primary-care presentation. Current literature describes mostly referral caseloads. This study aimed to investigate the prevalence, presentation, management, and outcomes of vestibular disease in dogs in primary-care UK practices.

METHODS

The study explored the VetCompass™ primary-care database. Potential vestibular disease cases during 2016

were identified before manual verification and further information was extracted.

RESULTS

From 905,544 study dogs, 759 vestibular cases were confirmed giving an overall prevalence of 0.08% (95% CI 0.07–0.09%). Springer Spaniels had 3.74 (95% CI 2.97–5.06, $P < 0.001$), Golden Retrievers 3.30 (95% CI 2.19–4.97, $P < 0.001$), Border Collies 2.78 (95% CI 2.03–3.80, $P < 0.001$) and Cavalier King Charles Spaniels 2.70 (95% CI 1.90–3.84, $P < 0.001$) times the odds for vestibular disease compared with crossbreeds.

Mean age at first diagnosis was 12 (SD: 3) years. The most common presenting signs were head tilt (69.8%), nystagmus (68.1%) and ataxia (64.5%). Central involvement was recorded in 14.1% cases.

The most frequently used treatments were antiemetics (43.2%), corticosteroids (33.1%), antimicrobials (25%) and propentofylline (23.25%). Only 27/759 (3.6%) cases were referred. Improvement was recorded in 317/759 (41.8%) of the cases after a mean of 10 days from diagnosis. Of 232/759 (30.6%) deaths during the study period, vestibular disease contributed to death in 144/232 (62%).

STATEMENT (CONCLUSIONS)

This study confirms low referral rates for vestibular disease cases, suggesting that primary-care data sources offer more generalisable information for benchmarking to help clinicians review their own clinical activities. Veterinarians should be aware of the strong breed predispositions identified here.

Incidence and clinical significance of Cystic Pharyngeal Hypophysis (Rathke's Pouch) in the dog

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OBJECTIVES

The pharyngeal hypophysis is the embryonic precursor to the anterior pituitary gland. Cystic expansion of this structure in the nasopharynx (previously termed Rathke's Pouch) has been reported on MRI images in a small case series of dogs and was associated with suspected

clinical significance. The aim of this study was to investigate the incidence and clinical significance in a large cohort of dogs.

METHODS

A retrospective review of a database of canine head MRI was performed with subsequent post-mortem examination of a cohort of preserved canine cadaver specimens.

RESULTS

Imaging changes consistent with a cystic pharyngeal hypophysis were identified on MRI images of 56 of 474 dogs (11.8%). Cysts were hyperintense to the surrounding mucosa on both T1 and T2 weighted images and could be identified in both sagittal and transverse planes. All cysts occurred in the roof of the nasopharynx on the midline. There was no evidence to suggest that the presence of these cysts was consistently associated with any clinical significance.

Gross examination of 25 preserved canine cadaver specimens demonstrated a grossly visible cystic mass lesion on the midline in the roof of the nasopharynx in

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2 animals. Histopathological examination demonstrated a mucosal fluid containing cyst lined by ciliated, pseudostratified epithelium consistent with previous reports of pharyngeal hypophysis.

STATEMENT (CONCLUSIONS)

Cystic pharyngeal hypophysis is a common finding on canine MRI which contrary to previous reports has no apparent consistent clinical significance

Preliminary findings of an investigation into the association between vaccination and immune-mediated diseases of the canine central nervous system

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OBJECTIVES

To determine whether there is a temporal relationship between vaccination of any type and the onset of immune-mediated central nervous system diseases (MUO and SRMA) in dogs.

METHODS

Retrospective, case-control study was conducted using data from the clinical records collected at a referral

hospital between 2011 and 2018 where vaccination records were available. 27 dogs with a diagnosis of inflammatory central nervous system disease were age- and gender-matched with an equal number of control dogs presented in the same time period for other diseases. Dogs who were vaccinated within 28 days before the onset of clinical signs of immune-mediated central nervous system disease were considered as a positive case in this study. To assess the association between recent vaccination and the onset of disease, odds ratio were calculated and categorical data was analysed using Fisher's exact test.

RESULTS

Three of the 27 dogs in the immune-mediated central nervous system disease group had been vaccinated within 28 days before onset of clinical signs versus nine dogs in the control group. The odds ratio for a dog showing signs of MUO or SRMA if vaccinated within the last 28 days was 0.25 (95% confidence interval 0.06 to 1.06; $p = 0.10$).

STATEMENT (CONCLUSIONS)

In this population of dogs, recent vaccination did not increase the likelihood of development of immune-mediated CNS diseases, although a larger sample size is required to confirm this finding.

Is CT an alternative to MRI in a morphometric analysis system for prediction of Chiari-like malformation associated pain and syringomyelia?

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OBJECTIVES

A system of MRI morphometric analysis to predict Chiari-like malformation associated pain (CM-P) and syringomyelia (SM) has been developed. The analysis relies on bony landmarks and computer tomography (CT) of the skull and cervical vertebrae may be useful to predict disease risk i.e. as a more economical pre-breeding screening test.

METHODS

This proof of principle pilot study compared morphometric analysis between MRI and CT. Medical records over 4 years were searched for dog breeds predisposed to CM-P and SM that had both MRI and CT head imaging. 13 dogs were identified (5 Chihuahua, 7 Cavalier King