STATEMENT (CONCLUSIONS)

This study provides vital information for veterinarians, breeders and owners of CKCS about common presentations of syringomyelia and other neurological diseases to allow for earlier recognition of these potentially painful

disorders. It concludes that syringomyelia is the most prevalent neurological disease in referral practices and emphasizes the frequency of pain associated with neurological disorders, but when compared to previous studies, it may be underdiagnosed in first opinion practices.

Rostral skull changes in Cavalier King Charles spaniels with Chiari-like malformation and syringomyelia

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OBJECTIVES

Chiari-like malformation (CM) and secondary syringomyelia (SM) have proven associations to multiple morphological traits of the caudal cranium and cervical spine in Cavalier King Charles Spaniels (CKCS). Since brachycephaly increases risk for disease, this study focused on the morphology of the rostral skull and forebrain and aimed to identify physical features associated to development of CM associated pain (CM-P) and SM with a more severe phenotype.

METHODS

Analysis of 12 measurements (11 lines and 1 angle) taken on T2 weighted midsagittal MRI of the skull and cervical spinal cord of 66 CKCS enabled the comparison of 3 phenotypic groups: dogs without SM or CM-P (control group; n = 11), dogs with CM-P only (n = 15), dogs with clinically severe CM/SM (syrinx transverse diameter ≥ 4 mm and clinical signs relating to SM; n = 40).

RESULTS

SM-affected CKCS had an increased height of the cranium ($p = 0.028$) and reduced depth of the stop ($p = 0.006$) compared to controls. SM-affected CKCS also had a significant reduction in height of the nasal cavity compared to CM-P ($p = 0.014$). There were 2 additional significant traits comparing dogs with and without SM; SM affected dogs had a more ventral orientation of the olfactory bulbs ($p = 0.014$) and shorter distance between basicranium and hard palate ($p = 0.031$).

STATEMENT (CONCLUSIONS)

Dogs with symptomatic CM/SM are more likely to have brachycephalic features of the rostral skull with "midface" hypoplasia similar to craniosynostosis Crouzan syndrome. This not only enhances our understanding of the disease and "at risk" head conformation but could also impact assessment of MRI and disease diagnosis.

Unusual clinical presentation of dystrophin-deficient feline muscular dystrophy in the UK

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OBJECTIVES

Dystrophin-deficient feline muscular dystrophy is a rare myopathy caused by absence of dystrophin, a large protein found in cardiac and skeletal muscles. The majority

of previously reported cases have presented with generalised muscle hypertrophy and overt gait abnormalities.

METHODS

An eight month old male neutered domestic short hair was referred for further investigation of a four day history of regurgitation and tongue lesions. Multiple non-painful raised white plaques were visualised on the tongue. Mild pelvic limb stiffness and plantigradism was detected. Cranial nerves were assessed to be normal.

RESULTS

Moderately increased ALT, AST and markedly raised Creatine Kinase were documented. Thoracic radiographs revealed severe oesophageal dilation, cardiomegaly, scalloped diaphragm and sternal malformation. Tongue lesion histology revealed calcinosis circumscripta. These features raised the suspicion of feline muscular dystrophy.

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