Oral presentations

Owner reported breathing scores, accelerometry and sleep disturbances in brachycephalic and control dogs

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OBJECTIVES

To compare daily physical activity, and length and quality of sleep in between brachycephalic dogs and a control population.

METHODS

Brachycephalic and control (non-brachiocephalic) client owned dogs were prospectively enrolled. Dogs wore

accelerometers to determine length of activity and sleep in a 24-hour period. Owners completed a questionnaire regarding typical daily activity and sleep patterns, and an "owner reported breathing (ORB) score". One hour of normal home sleep was recorded for each dog, and an observer subjectively quantified the dogs sleep quality.

RESULTS

Twenty brachycephalic dogs and 15 control dogs were included. There was no difference between age and weight of the dogs. Owners reported brachycephalic dogs to be significantly less active ($p = 0.022$) and a higher ORB score ($p < 0.001$) compared to control dogs. ORB score was positively correlated with increased sleep disturbances ($r^2 = 0.47$). There were no differences in active and sleep times based on accelerometry between groups.

STATEMENT (CONCLUSIONS)

Brachycephalic dogs have more disturbed sleep patterns, which may have negative implications on their welfare, but there were no differences in activity time or number of hours of sleep between brachycephalic and non-brachycephalic dogs. There is evidence of brachycephalic obstructive airway syndrome (BOAS) as assessed by ORB score is correlated with poorer sleep quality, suggesting that reduced sleep quality is part of BOAS, and owners may underestimate disturbed sleep patterns or may perceive disturbed patterns of sleep to be normal for brachycephalic dogs.

Assessment of hair cortisol concentration as a marker of chronic stress in dogs with congenital portosystemic shunts

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OBJECTIVES

To measure hair cortisol concentration as a measure of physiological stress in dogs with congenital portosystemic shunts (CPSS) compared with healthy control dogs.

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METHODS

Dogs with CPSS undergoing surgery and healthy dogs undergoing routine neutering were prospectively recruited to the study. Hair removed during routine surgical preparation was collected. Cortisol was extracted from hair samples using methanol and a salivary enzyme immunoassay kit was used to measure the concentration. Cortisol concentration was compared between CPSS and controls using a Mann-Whitney U test ($P < 0.05$).

RESULTS

Thirty-five dogs with CPSS (29 extrahepatic and six intrahepatic) and eight control dogs were included. The median age of CPSS dogs was 12 months (range 3–77) and the median age of control dogs was 12.5 months (6–49). The median cortisol concentration in the CPSS group was 0.405mg/dl (0.07–12.22) compared with that of the control dogs at 0.17mg/dl (0.06–0.76). This difference was statistically significant ($P = 0.004$). Six dogs had follow-up fur samples taken, five prior to a second surgery following partial shunt ligation. The cortisol concentrations increased in three dogs and decreased in three dogs.

STATEMENT (CONCLUSIONS)

The findings of this study suggest that dogs with CPSS experience chronic physiological stress with upregulation of their hypothalamic-pituitary-adrenal (HPA) axis

and this is likely to have a negative effect on their welfare. Measurement of cortisol is easily performed on hair samples and this may have potential for monitoring response to treatment in dogs with CPSS.

X-Y Shaped Periosteal Reconstructive Surgery Following Enucleation: A Retrospective Study in 16 Dogs

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OBJECTIVES

To describe the X-Y shaped orbital periosteal release reconstruction technique following enucleation in dogs and to evaluate its cosmetic and functional results.

METHODS

Medical records of 16 dogs from two different institutions that required enucleation were reviewed in our retro-

spective study. Eight of the dogs had a transconjunctival enucleation, whereas the rest had enucleation via the transpalpebral technique. In all of these cases the enucleation was followed by a periosteal tissue reconstruction in X-Y shape, followed by subcutaneous and eyelid closure.

RESULTS

In the short term follow up (two weeks) all dogs showed good clinical outcomes, no signs of discomfort, discharge or sinking of the eyelids. Only two dogs had mild periorbital oedema, which was treated with cold compresses and non steroid anti-inflammatory drugs for five days. Sixty days post surgery, all patients were still in good clinical condition, while the periorbital oedema in the two dogs had completely resolved and the owners were very satisfied with the cosmetic result. None of the patients showed eyelid depression.

STATEMENT (CONCLUSIONS)

The X-Y periosteal reconstructive procedure is quick, easy to perform and it does not require the use of synthetic implants in the orbit. It also provides excellent support for the eyelids in cases where a more extensive excision/exenteration of the orbital contents is required. Finally it provided an excellent cosmetic result without complications in all of our cases in the long term follow up.

Factors affecting survival to discharge in sixty-two cats diagnosed with uroabdomen; a retrospective analysis

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OBJECTIVES

To investigate factors which affect survival to discharge in cats diagnosed with uroabdomen.

METHODS

Sixty-two cats diagnosed with uroabdomen at a veterinary teaching hospital were identified between June 2003 and September 2016. Data collected included signalment, presenting signs, aetiology, location of rupture, presence of concurrent injury, outcome of urine culture, presence of uroliths, surgical procedure, packed cell volume at presentation and creatinine/potassium levels at presentation. Patients were also determined if they survived to discharge and if they were euthanised or died.

RESULTS

Seventy four percent (n = 46) of patients survived to discharge. Male cats were statistically more likely than female cats to develop uroabdomen (P = 0.032). The