Poster presentations

A rapid review of surgical techniques for correction of prolapsed nictitans gland in dogs

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OBJECTIVES

We conducted a systematic and replicable literature search to identify peer-reviewed studies describing surgical techniques and post-operative outcomes for the management of canine prolapsed nictitans gland.

METHODS

We searched CAB Abstracts, PubMed, and Medline using terms relevant to dogs, nictitans gland, and surgery to identify relevant papers.

RESULTS

Twelve papers describing seven different replacement techniques were identified, along with gland excision. All

studies were case series with the exception of a single crossover trial. Outcomes reporting was heterogeneous: surgical failure rates were reported in most studies but lacrimal outcome data was underreported. One technique (Morgan pocketing) had a sufficient number of reports to allow proportional meta-analysis, yielding a summary failure rate of 7% (95% CI 3–11%). Breed-specific recurrence rates were not available in sufficient detail from most studies for adequate data extraction.

STATEMENT

There is insufficient evidence to show equivalence or superiority of identified surgical techniques, particularly for the management of 'difficult' breeds. Heterogeneous reporting of outcomes and breed composition of patient populations, small study size, and potential sources of bias make it difficult to draw conclusions on post-operative recurrence, complications, and long term lacrimal outcomes. Procedures vary in technical difficulty. The Morgan pocketing technique appears to have an overall low surgical failure rate and may be most easily adapted to a general practice setting. However, relative success of this procedure in 'difficult' breeds is not well documented. Better quality evidence with more uniform reporting may allow improved selection of procedures tailored to the patient and clinician.

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Effect of body position, eyelid manipulation and manual jugular compression on intraocular pressure in clinically normal cats

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OBJECTIVES

To determine the effect of body position, eyelid manipulation and manual jugular compression on intraocular pressure (IOP) in clinically normal cats

METHODS

Twenty-one clinically normal intact domestic short-haired cats ranging in age from 14 to 26 months without any disease or medication were used in this study. The rebound tonometer (TonoVet®, icare, Helsinki, Finland) were used for intraocular pressure measurement. IOP was measure in sternal (baseline values) and ventrodorsal body position. four manipulations were used in each eye, including maximal dorsoventral extension of the eyelids, lateral eyelid extension, manual compression of the ipsilateral jugular vein, manual compression of both jugular veins.

RESULTS

Overall mean±SD IOP values of all eyes in sternal body position, ventrodorsal body position, maximal dorsoventral extension of the eyelids, lateral eyelid extension, compression of the right jugular vein, compression of the left jugular vein and compression of the both jugular vein were 16.1±2.9 mmHg, 17.1±5.0 mmHg, 21.7±5.8 mmHg, 22.4±5.6 mmHg, 15.0±3.7 mmHg, 14.9±3.7 mmHg,

16.1±4.6 mmHg, respectively. IOP was increased significantly in maximal dorsoventral extension of the eyelids ($P=0.00$), lateral eyelid extension ($P=0.00$) compare to the baseline. Surprisingly IOP was decreased significantly in compression of the left jugular vein ($P=0.03$) but this decrease was not clinically significant. In ventrodorsal body position IOP was increased but it was not significant.

STATEMENT

Results of this study maybe beneficial for clinicians and veterinary surgeons to be aware of the effects of body position, traction and compression of eyelids and neck on IOP during ophthalmic examination and surgery in cats.

Repair of Y-T humeral condyle fractures in the dog with locking compression plate (LCP) fixation

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OBJECTIVES

To evaluate canine Y-T humeral condyle fractures stabilised with a transcondylar screw and DePuy-Synthes locking compression plate (LCP) fixation.

METHODS

A retrospective review of clinical records and radiographs of dogs with Y-T humeral fractures, where stabilisation included LCP fixation. The implants placed, time to radiographic union, complications encountered,

post-operative lameness and range of motion were recorded.

RESULTS

Eighteen fractures met the inclusion criteria, with a follow up time ranging from 1.5 weeks to 7 months. The age of the dogs ranged from 6 months to 8 years, and body-weight ranged from 8.5kg to 35kg. Incomplete Ossification of the Humeral Condyle (IOHC) was identified in 15/18 patients. All fractures had an open combined medial and lateral approach to the humeral condyle, and had a single transcondylar screw placed, with the supracondylar region stabilised with bilateral LCPs in 16/18, LCP with veterinary cuttable plate (VCP) in 1 and a single LCP in 1. Additional supracondylar fixation implants were used in 9/18. Minor complications were reported in 1/18 and no patients required revision surgery. Limb function at follow-up 6–8 weeks was graded as excellent in 5, good in 4, fair in 3 and poor in 1 fracture. Range of elbow flexion was considered normal in 3, mildly reduced in 8, moderately reduced in 1 and markedly reduced in 1. All fractures with sufficient follow up achieved radiographic union.

STATEMENT

Canine Y-T humeral fractures stabilised with medial or medial and lateral LCP plates resulted in no major complications, reliable healing, and good limb function in 12/13 patients.

Stem cell yields are less than 10% from canine stromal vascular fraction and further reduced after cryopreservation

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OBJECTIVES

Mesenchymal stem cells (MSCs) can be isolated from adipose tissue by enzyme extraction using collagenase. The resultant cell mixture is called the stromal vascular fraction (SVF) and is a heterogeneous mixture of cells and cellular debris. Various systems are available to produce SVF as a same-day 'stem cell therapy' from adipose tissue. This study estimated the MSC yields from fresh SVF and investigated the effects of cryopreservation of the SVF on MSC numbers.

METHODS

Adipose samples were processed to form SVF using a standard protocol using collagenase. The resultant SVF was split into two equal portions. One was placed directly into culture and the second was cryo-frozen and then thawed and cultured. Cultures were

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