RESULTS

There were 257 and 238 respondents to the two surveys respectively. The most common canine fracture addressed with MIO techniques were tibial fractures. The most frequently stated advantages of MIO were faster healing time (26%) and less post-operative pain (20%). The most commonly stated disadvantages of MIO techniques were need for new equipment (27%) and challenges to achieving adequate fracture reduction (18%). When considering MIPO specifically 71% of respondents stated that they performed MIPO rarely or occasionally. 151 respondents (63%) were keen to perform more MIPO than their current level. The most common fracture

stabilised with MIPO in both cats and dogs were tibial fractures. MIPO was less commonly performed in cats than dogs (39% vs 15%). 24% of respondents stated that there were not enough MIPO training opportunities.

STATEMENT (CONCLUSIONS)

This study demonstrated recognition of the benefits of MIO and MIPO techniques amongst veterinary orthopaedic surgeons. Despite this there remains limitations to its application within clinical practice and the study has highlighted areas for further development to improve its use clinically.

“If it looks straight, it is straight?”—establishing the normal axes and joint angles in small breed dog

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OBJECTIVES

Angular limb deformities are difficult cases to manage. When animals are bilaterally affected having a normal reference value for joint axes and angles ensures optimal patient outcome through preoperative management. Although this has been established for medium-large breed dogs no such values exist in small dogs. The purpose of this study was to establish the normal anatomic axis of the canine radius in the frontal and sagittal planes, in a population of adult small breed dogs

METHODS

Radiographs of the antebrachium in skeletally mature small breed dogs were reviewed from the electronic database of the hospital. Radiographs were used to determine normal ranges of frontal and sagittal plane anatomic axes and relevant angles; aMPRA, aLDRA, aPCRA, aDCdRA, procurvatum and frontal plane angle.

RESULTS

28 dogs met the inclusion criteria. Mean $\pm$ SD reference ranges for these dogs were aMPRA $80.5^\circ \pm 2.7$, aLDRA $85.2^\circ \pm 2.1$, aPCRA $88.7^\circ \pm 2.9$, aDCdRA $82.8^\circ \pm 3.1$, Procurvatum $19.8^\circ \pm 5.2$.

STATEMENT (CONCLUSIONS)

Ranges for normal canine radial axis in small breed dogs are similar to those previously reported for Labradors and medium-large breed dogs. These reference ranges can be used for management and preoperative planning of small-breed dogs with antebrachial growth deformities, when a bilateral condition prevents the use of the opposite limb as a reference.

Abbreviations: aMPRA – anatomical edial proximal radial angle, aLDRA – anatomical lateral distal radial angle, aPCRA – anatomical proximal caudal radial angle, aDCdRA – anatomical distal caudal radial angle

Double locking plates and screw fixation after Tibial Plateau Leveling Osteotomy: effect on postoperative infection rate in dogs over 50 kg

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OBJECTIVES

To investigate and analysis the effect of double locking plates and screw fixation (DLP) in dogs >50 kg undergoing tibial plateau leveling osteotomy (TPLO) on postoperative infection rate.

METHODS

This is a retrospective study using medical records (January 2003–October 2017) from a single orthopaedic referral hospital. The inclusion criteria were body weight >50 kg and a DLP or standard locking plate and screw fixation (LP) or conventional non-locking plate and screw fixation (NLP) was used. Logistic regression analysis evaluated for associations with infection occurrence.

RESULTS

275 dogs were included for the study and postoperative antibiotics were dispensed to 168 (61.1%) dogs. NLP was used in 114 (41.5%), LP in 128 (46.5%) and DLP in 33 (12%) dogs. Postoperative infection was diagnosed in 48 (17.5%) dogs. Dogs with NLP, LP, and DLP had postoperative infection rates of 24.5%, 13.3%, and 9.1%, respectively. The usage of a locking construct and postoperative antibiotic therapy were associated with significant reductions in postoperative infection. A non-locking construct increased and postoperative antibiotics

decreased the risk of infection by 2.08 and 2.37 times, respectively.

However, DLP did not result in a statistically significant reduction in infection.

STATEMENT (CONCLUSIONS)

A locking construct and postoperative antibiotic therapy significantly reduced the risk of postoperative infections in dogs >50 kg undergoing TPLO. Further investigations are required to determine if the use of DLP could be justified in this cohort of dogs.

Gait analysis of lameness-free dogs: experience with a Tekscan pressure-sensitive walkway system

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OBJECTIVES

To define reference intervals and investigate repeatability for key gait parameters in a lameness-free canine population using a pressure-sensitive walkway (PSW) system.

METHODS

Following institutional ethical approval, 40 healthy client-owned dogs of various breeds weighing 15–40 kg and

between 2–6 years old were recruited. Orthopaedic pathology was ruled out by clinical examination and using validated owner questionnaires. Six valid trials (3 in each direction) were obtained using a 2 m by 0.46 m PSW (Tekscan 5101E-VH4), equilibrated daily and calibrated weekly. For a valid trial, all paws had to contact the PSW for two or more consecutive strides, with a constant velocity of 0.9–1.1 m/s, while walking with a loose leash without overt head movements. Measurements were repeated for 10 dogs on a different day. Symmetry indices for key gait parameters were derived and reference intervals for these created from bootstrapped 2.5% and 97.5% percentiles.

RESULTS

Stance time, stride length and peak vertical force reference intervals were typically under $\pm 10\%$, and narrower for forelimbs than hindlimbs. Coefficient of variation for repeated measurements was typically under 10%. Direction of travel had statistically significant, but clinically unimportant effects, on several gait parameters.

STATEMENT (CONCLUSIONS)

Pressure-sensitive walkway data are repeatable and show relatively little variation, such that deviations beyond reference intervals may permit identification and monitoring of lameness in clinical patients. Pressure-sensitive walkways may be useful in assessing clinical gait profiles and monitoring response to treatments such as surgery or physiotherapy.

Complications and outcomes following feline dorsal pantarsal arthrodesis using a pre-contoured plate in 32 cats (2010–2018)

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OBJECTIVES

To report the clinical perioperative (0–3 months) outcome and complications of pantarsal arthrodesis (PTA) with dorsal plating in 32 cats without postoperative external coaptation, and to report long-term outcome based on owner's perception with the Feline Musculoskeletal Pain Index (FMP) questionnaire.

Presented by BSAVA
Guest (guest)

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