which also required a loose screw be removed 5 weeks post operatively. 2 cases required implants to be removed due to migration, one of these also had a recurrence of lameness caused by a broken implant 8 months post operatively which was successfully managed conservatively. No cases were reported to later require pantarsal arthrodesis.

CONCLUSIONS

Articular fractures of the talus are occasionally seen in practice and may prove a diagnostic challenge due to their varied presentations and radiographic superimposition of structures. Pathology of the talus may be suspected in any case of lameness localised to the hock and oblique/skyline radiographic views or advanced imaging should be considered. Short term follow up of all cases demonstrated good healing of the fracture site and fibular osteotomy, where applicable.

Intra- and inter-observer reliability and repeatability of computed tomographic changes affecting the medial coronoid process in the canine elbow

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Medial coronoid process disease (MCPD) is the most prevalent lesion identified in canine elbow dysplasia. When assessing the medial coronoid process on CT images, several features can be used to categorize the presence or absence of disease. These include the presence or absence of osteophytes, presence and degree of subchondral sclerosis affecting the coronoid process and overt fragmentation, the fragment being displaced or non-displaced.

The aims of this study were to assess inter- and intra-observer reliability when interpreting the presence or absence of MCPD, the presence or absence of fragmentation and the presence or absence of osteophytes from a single transverse CT image at the level of the medial coronoid process. Further aims were to establish inter- and intra-observer reliability for (i)

grading the coronoid process sclerosis (grade I to III) and (ii) identifying of the anatomical region of the medial coronoid process. Furthermore, we report a method using a sclerometer to provide a quantitative measure of the amount of ulnar sclerosis from CT images.

Eight observers reviewed 84 elbow CT transverse images twice on two occasions separated by at least four weeks. Observers were asked to assess all the images for four features: presence or absence of MCPD, presence or absence of fragmentation, presence or absence of osteophytes and grade of sclerosis. They were also asked to draw a line where they considered the junction between the normal and the sclerotic trabecular bone to be and to draw another line where they considered the anatomical caudal border of the coronoid process (BoCo). Cohen's kappa and Intraclass Correlation Coefficient were calculated to quantify the agreement.

Inter-observer agreement was fair for identification of CT changes consistent with MCPD, moderate for fragmentation and osteophytes detection. It was poor for the sclerosis grading. The percentage sclerosis measured with the sclerometer had a moderate to almost perfect inter- and intra-observer agreement. The inter- and intra-observer agreement for the BoCo was poor.

In conclusion, this study demonstrates that features commonly assessed on transverse CT images including the presence or absence of MCPD and sclerosis grade have only poor to at best moderate inter-observer agreement. These findings suggest that subjective assessment of CT images is less reliable and repeatable between observers and more quantitative methods should be used such as the percentage sclerosis.

Canine musculoskeletal problems encountered in first opinion practice

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Diseases of the musculoskeletal system are amongst the most common problems affecting dogs presented to first opinion veterinary practice. Many of these diseases are lifelong and

debilitating and so likely to be of high importance to both veterinary practitioners and owners. The aim of this study was to determine the common canine musculoskeletal problems encountered during first opinion consultations, including common clinical signs, diagnoses and treatments.

Data were collected during direct observation of consultations at eight veterinary practices. A data collection tool was used to record information on all problems discussed during the consultation. Information gathered on each problem included who initially raised the problem, clinical signs reported, diagnosis made, treatments prescribed and management advice given.

In total, 1235 dogs were presented with 2158 health problems discussed, of which 221 (10.2%) were musculoskeletal problems. The majority of cases involved a pre-existing

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On: Wed, 26 Apr 2023 11:53:54

musculoskeletal problem (n=151; 68.3%) while fewer involved a new problem (n=70; 31.7%). A musculoskeletal problem was the primary reason for presentation in 117 (52.9%) cases and an additional problem discussed in 104 (47.1%) cases. The owner raised the musculoskeletal problem in 127 (57.5%) cases while the veterinary surgeon raised the problem in the remaining 94 (42.5%) cases. The most common clinical signs noted were lameness (n=79; 35.7%), stiffness (n=36; 16.3%) and pain (n=16; 7.2%). The most common diagnoses were osteoarthritis (n=106; 48.0%), soft tissue injury (n=30; 13.6%) and cranial cruciate ligament rupture (n=28; 12.7%). Non-steroidal anti-inflammatory drugs (n=120; 54.3%), controlled exercise (n=65; 29.4%) and nutraceuticals (n=45; 20.4%) were the most common methods used to treat or manage

these musculoskeletal problems.

The results provide insight into the types of canine musculoskeletal problems seen in first opinion practice and may have implications for veterinary education, practice and research. The findings suggest these problems are often chronic and painful and so are likely to be important from an animal welfare perspective. Musculoskeletal problems were often an additional problem discussed and were frequently raised by the veterinary surgeon, highlighting the role of the practitioner in ensuring these problems are adequately detected and managed. Comparison of the results with existing literature could be used to identify knowledge gaps in the evidence base and pinpoint focused, relevant topics for future research on musculoskeletal problems.

Construct validity and internal consistency for three quality of life questionnaires for cats with chronic musculoskeletal pain

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INTRODUCTION AND AIM

Behavioral and lifestyle changes are the most common symptoms of chronic pain caused by musculoskeletal disease in cats. Owner questionnaires are an important tool in order to identify these cats. The aim of the present study was to establish the construct validity and the internal consistency for three quality of life (QoL) questionnaires in sound, pain free cats and in cats with chronic pain due to musculoskeletal disease. The hypothesis for testing the construct validity was that the questionnaires could distinguish between the cats with chronic pain and the pain free ones. The hypothesis for testing the internal consistency was that analyzing Cronbach's alpha would indicate good internal consistency ($\alpha > 0$).

MATERIAL AND METHODS

The health status of 69 cats was examined with a veterinary

orthopedic examination and registrations on a pressure sensitive mat system (Walkway™ System High Resolution HRV4). Cats with painful joints had the affected joints radiographed. Of the three QoL questionnaires, the Swedish QoL questionnaire was used in 58 healthy cats and in 11 cats with musculoskeletal disease. The QoL questionnaire by Bennett and Morton and the questionnaire by Zamprogno *et al.* were used in 28 healthy cats and in 11 cats with musculoskeletal disease. Construct validity was tested by use of Wilcoxon signed rank test ($p < 0.05$) and the internal consistency was evaluated by calculating Cronbach's α .

RESULTS

There was a significant difference between pain free cats and cats with chronic pain, in the results from the QoL questionnaires. This confirms the hypothesis that the three questionnaires have good construct validity, in that they can distinguish between cats with chronic pain and pain free ones. Cronbach's α was > 0.7 for all three QoL questionnaires which confirms the hypothesis that they have good internal consistency.

CONCLUSION

The three QoL questionnaires have good construct validity and internal consistency. Further studies are needed to confirm the results and add to the process of validating QoL questionnaires for cats with chronic pain due to musculoskeletal disease.

Outcome following surgical stabilisation of tarsocrural instability in dogs

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OBJECTIVE

To evaluate the outcome and complications following surgical stabilisation of canine tarsocrural luxation/subluxations.

METHODS

Medical records of dogs with tarsocrural joint instability treated at the Royal Veterinary College from 2007-2014 were reviewed. Complications were divided into **minor** (no additional surgical treatment), or **major** (additional surgical treatment). Data were tested for normality and groups compared using Mann-Whitney or Fishers-exact test. $P < 0.05$ was considered significant.

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