Femoral head and/or neck fractures in 42 cats

Christopher Jordan¹, Pilar Lafuente²,
Gareth Arthurs³

¹ Anderson Moores Veterinary Specialists, Winchester, Hampshire, UK

² The Royal Veterinary College Department of Clinical Sciences and Services, St. Albans, Hertfordshire, UK

³ Arthurs Orthopaedics, Northampton, Northamptonshire, UK

INTRODUCTION

There is limited data to guide management of cats with Femoral Head and/or Neck Disease (FHND). We report a series of 42 cats with Femoral Head and/or Neck Fracture (FHNf) in conjunction with clinical outcome and owner and/or primary veterinary surgeon follow-up.

MATERIALS AND METHODS

Retrospective review of cats with FHND presented to The Royal Veterinary College Queen Mother Hospital for Animals (QMHA) Orthopaedic Service between October 2002 and August 2011. Control cases were cats presented to the QMHA Orthopaedic Service during the study period which did not have FHND. Data recorded included signalment, radiographic lesion(s) and management. Follow-up was through telephone interview of the client and/or primary veterinary surgeon.

RESULTS

Forty-two cats with 49 FHNf met the inclusion criteria. No cat

had evidence of FHND without FHNf. Cats with FHNf were significantly younger than controls. The proportion of pedigree cats in the group with FHNf was significantly greater than in the control group.

Thirty-two cats had radiographs available for review. Twenty-five cats had Femoral Capital physeal Fracture (FCF), six cats had Femoral Neck Fracture (FNF) and one had an FHNf which could not be classified. Femoral neck osteolysis was seen in seven cats all of which had concurrent FCF or FNF. Cats with femoral neck osteolysis had a duration of clinical signs significantly longer than those without femoral neck osteolysis. No cat had radiographic evidence of metaphyseal osteopathy.

Twenty-nine cats were managed with Femoral Head and Neck Excision (FHNE), 12 were reduced and stabilised with K-Wires (KW) and seven were managed conservatively.

Median duration of follow-up was 16.5 months. 14/21 cases managed with unilateral FHNE, 1/2 with bilateral FHNE, 3/4 with unilateral KW and 2/2 with conservative treatment were reported as completely normal. There was no significant difference in complication rate between different managements.

CONCLUSION

FHNfs in cats can be successfully managed with FHNE, KW or conservatively. This study highlights the variable presentation and radiographic appearance of FHNf and the possibility of a similar radiographic appearance with increasing length of clinical signs. Further to this, all cats had FHNf and cats with femoral neck osteolysis had a duration of clinical signs significantly longer than cats which did not have femoral neck osteolysis therefore metaphyseal osteopathy could be considered a radiographic description rather than a diagnosis.

Articular fractures of the canine talus: a retrospective study of 11 cases

Luke Perry, Neil Burton,
Sorrel Langley-Hobbs

University of Bristol, Bristol, UK

STUDY DESIGN

Multi-centre retrospective case series.

ANIMALS

Dogs (n=11) with isolated articular fractures of the talus.

INTRODUCTION

Isolated talar fractures in the dog are rare and peer reviewed literature pertaining to this condition is sparse. The purpose of this study is to report on 11 dogs with isolated talar fractures.

METHODS

Medical records (2008–2014) of dogs with articular fractures of the talus and no other associated fractures were reviewed. Information regarding signalment, presenting history, imaging, fracture classification, surgical treatment, complications and outcome was obtained.

RESULTS

11 fractures are described with varying presentations. One of these fractures was severely comminuted, involving multiple fragments and complete separation of the trochlear ridges. All other fractures affected the lateral ridge only. In 2 cases, computed tomography was the only imaging modality used. Of the 9 cases initially assessed radiographically only 3 had a fracture visible on standard radiographic views. In all other cases further radiographic views or advanced imaging was required. One case was euthanised due to concurrent septic arthritis and one case was treated with external coaptation. The remaining 9 fractures were treated with open reduction and surgical stabilisation. Repeat radiographs were performed between 4 and 6 weeks post operatively in all treated cases and good but incomplete healing was evident at this stage. 3 cases suffered from cast-related soft tissue wounds, one of

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IP: 54.89.56.158

On: Wed, 26 Apr 2023 14:39:23

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

Naomi Shimizu, Chris Warren-Smith, Sorrel Langley-Hobbs, Neil Burton, Elvin Kulendra, Kate Bradley, Eli Bowen, Andy Holdworth, Kevin Parsons,

Langford Veterinary Services, The University of Bristol, Bristol, UK

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

Natalie Robinson¹, Marnie Brennan¹, Malcolm Cobb², Rachel Dean¹

¹ Centre for Evidence-based Veterinary Medicine, The University of Nottingham, Loughborough, Leicestershire, UK
² The University of Nottingham, Loughborough, Leicestershire, UK

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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