Oral presentations

Cell suspensions from each plate were then cultured over five days.

RESULTS

Following 24 hour exposure to OA-SF, the adMSCs demonstrated >85% viability with no significant differences in the total numbers of cells as compared with control medium or canine serum and no evidence that

OA-SF changed the ability of these stem cells to grow *in vitro*.

STATEMENT

Cultured canine adMSCs when exposed to osteoarthritic synovial fluid for 24 hours not only remain fully viable but also continue to grow in culture, indicating that cultured adMSCs will retain both their viability and ability to grow when injected into arthritic joints.

Feline total hip replacement: case series

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OBJECTIVES

Total hip replacement (THR) for cats has only been reported in the veterinary literature in combination with dogs or as small preliminary series/single reports.

Our objective was to report the outcome of a larger case series of feline patients undergoing THR for a variety of coxofemoral pathologies; including those undergoing bilateral THR (only one cat previously reported) and those receiving nano implants (no published reports).

METHODS

Medical records of 15 cats (19 hips) that underwent THR using BioMedix implants were reviewed.

RESULTS

Reasons for THR included capital physeal fractures (n=7), malunion of chronic femoral neck fractures (n=4), coxofemoral arthrosis secondary to hip dysplasia (n=5), poor function following femoral head and neck ostectomy (FHNO) (n=2), and femoral neck fracture following coxofemoral toggle procedure (n=1).

No intra-operative complications occurred; post-operative complications occurred in 4/19 procedures. Two patients developed medial patellar luxation and were successfully revised; two patients luxated the THR and were converted to FHNO.

Of the 17 quiescent THR, lameness resolved by 12 weeks post-operatively in 14/17. A mild lameness remained at 12 weeks in 2/17 and 1/17 was lost to follow-up.

Bilateral THR procedures were staged and lameness resolved in all. Two patients received nano implants (one luxated and one had a resolution of lameness without complication).

STATEMENT

THR can be utilized for a range of coxofemoral pathologies in cats and provide good outcomes including following bilateral procedures. Nano THR implants can be inserted into cats. Luxations of the prosthesis or patella are previously reported complications following feline THR and warrant specific consideration.

Preliminary validity testing of four clinical metrology instruments in osteoarthritic cats

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OBJECTIVES

Diagnosing feline osteoarthritis (OA) is currently based on a combination of the cat's medical history, physical examination and radiography. Conflicting findings from physical examination and radiography renders difficulties. Using client-based Clinical Metrology Instruments (CMI) to assess the cat's behaviour and physical abilities are important tools in identifying chronic pain and

dysfunction. The objective of the study was to test the validity of four CMIs.

METHODS

Cats participating in a cross-sectional study were grouped as OA (10) or healthy (10) based on their medical history and findings from the physical examination. The joints with findings on the physical examination were radiographed. CMI I (Benito *et al.*, 2013), II (Zamprogno *et al.*, 2010) and III (Bennet & Morton, 2009) contain questions where the cat owner rates the cat's ability. CMI IV (Stadig & Bergh, 2011, unpublished data) contain binary questions. Criterion and content validity was tested by analysing Kendall's tau and Cronbach's α respectively.

RESULTS

The sensitivity for CMI I, III and IV was 0.9. CMI II had a sensitivity of 0.8. The specificity was 0.9 for CMI I and II, and 0.8, for CMI III and IV. Kendall's tau was 0.61 for CMI I, 0.66 for CMI II, 0.64 for CMI III and 0.65 for CMI IV. Cronbach's α was 0.91 for CMI I, 0.93 for CMI II, 0.83 for CMI III and 0.81 for CMI IV.

STATEMENT

CMI I had the most evenly balanced results on all parameters analysed. This instrument shows promising results and can make an important contribution to improved diagnostics.