STATEMENT (CONCLUSIONS)

Direction of travel may influence gait characteristics and thereby both determination of local reference intervals and discriminatory ability between normal and abnormal limbs. Consistent walkway room setup and use

of multiple passes in both directions appear sensible in order to minimise error between measurements at different times, and to compensate for the effect of direction of travel on outcome measures.

Effect of osteoarthritis on the repeatability of patella tendon angle measurement in dogs

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OBJECTIVES

To evaluate the effect of the degree of osteoarthritis on the measurement of patella tendon angle (PTA) and determine intra- and inter-observer variability.

METHODS

Retrospective observational clinical study using pre-operative medio-lateral surgical planning radiographs for tibial tuberosity advancement (TTA). Degree of osteoarthritis scored by two individuals. Measurement of PTA

performed by three different individuals on 87 stifle radiographs by the standard conventional tibial plateau method. Measurement of PTA performed on three occasions, with at least seven days between measurements.

RESULTS

The osteoarthritis score agreement was 48%. Weighted Kappa analysis revealed a fair strength of agreement between observers. The intra-observer average bias between PTA measurements 1 and 3 ranged from -0.38 to -0.94° . Inter-observer bias in angle measurement ranged from -0.92 to -2.00° . Observer 1 had the narrowest range of PTA differences (12.1°), and observer 3 the highest (23.5°). Observer 2 had the lowest mean bias (-0.38°). The mean bias was lowest between observers 1 & 2 (-0.92°) and highest between 1 & 3 (-2.0°). The mean intra-observer standard deviation of the PTA measurement differences was 2.90° and inter-observer was 2.26° . Kruskal-Wallis testing revealed no evidence of a difference in PTA with regards to degree of osteoarthritis present. There was no evidence of a change in variability of the PTA with higher or lower osteoarthritis scores.

STATEMENT (CONCLUSIONS)

Overall degree of osteoarthritis did not appear to affect the variability of the patellar tendon angle measured. Variability in PTA measured between observers may affect the clinical outcome of surgery.

Medio-lateral humeral intracondylar fissure screw placement – 4.5 mm titanium screws

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OBJECTIVES

Evaluating the influence of categorical patient variables on the time elapsed from the surgical date and date of the final recheck following treatment of humeral

intracondylar fissure in dogs with medio-lateral placement of 4.5 mm titanium screws.

METHODS

Retrospective data analysis was applied to 100 dogs treated for humeral intracondylar fissure. The breed, sex, age, weight, date of surgery and date of final recheck were reviewed.

RESULTS

Thirty eight of the study group diagnosed with a humeral intracondylar fissure were treated with a 4.5 mm titanium screw placed in a medio-lateral direction. The mean duration of time between the surgical date and final recheck was 69 days. Six of the cases required revision surgery due to inadequate screw placement. Five cases presented with complications (superficial surgical site infection and seroma formation), which were treated conservatively. The mean age of dog was 1581 days and mean weight 20.5 kg.

Oral presentations

The mean time (days) between surgical date and the final recheck was greater in neutered patients (Male neutered: 74.53, Female neutered: 86.5, Male entire: 53, Female entire: 44). 78% of the cases were spaniels. Elapsed time between the surgical date and the final recheck was found to be lower in spaniel breeds (63 days) when compared to non-spaniel breeds (96 days).

STATEMENT (CONCLUSIONS)

Data analysis presented no clear correlation between the patient weight/age and total time elapsed from screw placement to the date of the final recheck. The breed and neuter status of the dog was found have to have an influence on this time.