Retrospective study of occurrence and types of complications associated with different procedures to correct traumatic hip luxation in 44 dogs

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OBJECTIVES
Retrospective, observational and analytical study assessing the demography of traumatic hip luxation in dogs and the complications associated with different correction techniques. This study aims to assess whether certain techniques are superior with regard to outcomes, associated complications and the respective complication rate.

METHODS
The cases of animals with unilateral or bilateral luxation of the coxo-femoral joint as a result of trauma between 2009 and 2018 were reviewed. Signalment, clinical signs, treatment type (closed reduction, closed reduction followed by surgical reduction and stabilization, or immediate surgical reduction and stabilization), outcome and complications were recorded for each patient. Statistical evaluation was performed to identify relationships between treatment type and outcome or rate of complications.

RESULTS
Forty-four dogs were included in the study. Mean age was 4 years (range 3 months–12 years) with a mean weight of 19 kg (range 4–48 kg). Road traffic accidents (n = 17) and animals exercising (n = 8) were the most common causes of traumatic luxation. Seven surgical procedures were represented in this data set, the most common being ilio-femoral suture. Closed reduction was attempted primarily in 33/44 cases however a significant proportion of these cases re-luxated (n = 24), requiring further surgical correction. Complication of re-luxation post-surgical reduction was notably less (n = 4). Post surgical infection was uncommon, recorded in (n = 2) cases.

STATEMENT (CONCLUSIONS)
Given the increased rate of re-luxation in animals managed with closed reduction it could be suggested that surgical intervention is warranted as the primary course of treatment.

The effectiveness of marine based fatty acid compound (pcso-524) alone and combined with previcox in the treatment of canine osteoarthritis

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OBJECTIVES
The purpose of this study is to assess the effectiveness of a marine-based fatty acid compound alone and in combination with firocoxib for treatment of osteoarthritis-associated pain in dogs using objective measures of limb use and validated subjective assessments.

METHODS
A double-blinded randomized prospective clinical trial was performed with 31 dogs. Dogs were randomly allocated to a PCSO-524 group (PCSO) or a Firocoxib + PCSO-524 (FCX-PCSO) group. Owners were masked to use of firocoxib by using identical placebo tablets in the PCSO-524 group. Force plate gait analysis and the owner-completed Canine Brief Pain Inventory tool were used to evaluate patients at 0, 2 and 4 weeks. Data were analyzed using repeated measurement analysis with significant level set a 5%(α = 0.05).

RESULTS
Peak Vertical Force (PVF) values were significantly increased over baseline at week 2 and week 4 in both groups (p < 0.05). A significant decrease in the CBPI scores (improvement) was seen at week 2 and 4 in the PCSO
Oral presentations

Vertical mandibular range of motion and mandibular length ratio as a non-invasive tool for assessment of temporomandibular joint function in dolicho- and brachycephalic dogs under anaesthesia: 9 breeds, 111 dogs

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OBJECTIVES
To establish a reliable reference in assessment of the temporomandibular joint (TMJ) function using a user-friendly instrument in order to improve the diagnostics of TMJ disorders and monitor response to surgical and non-surgical management of TMJ disease in dog. Furthermore, to observe the influence of skull conformation (dolicho- and brachycephalic) and body weight on vertical mandibular range of motion and mandibular length.

METHODS
Prospective study focused on measuring vertical mandibular range of motion (vmROM) and mandibular length using a caliper in 111 anesthetized dogs, undergoing various surgical procedures unrelated to TMJ, representing nine phenotypically different breeds, both dolicho- and brachycephalic: Labrador Retrievers, Border collies, Dachshunds, English Springer Spaniels, German Shepherd Dogs, Staffordshire Bull Terriers, French Bulldogs, Pugs and Rottweilers. The ratio between vmROM and mandibular length (mandibL) was calculated for each patient.

RESULTS
Differences in measured parameters were found among certain breeds, ex. in Rottweilers–mean vmROM 132.75 mm, mandibL 139.5 mm, whereas in Pugs - 68.09 mm and 76.9 mm respectively. Despite those differences, the vmROM/mandibL ratio was similar: 0.93 in dolicho- and 0.94 in brachycephalic breeds with minimal variations (+/- 0.06). A significant correlation was found between body weight and both vmROM and mandibL, with correlation of 0.696 and 0.791 (p-value < 0.01) respectively.

STATEMENT (CONCLUSIONS)
The ratio vmROM/mandibL is a potential reliable and simple tool to assess TMJ disease. It can help guiding the need for advanced imaging and may improve TMJ disorders detectability. Using the ratio may facilitate TMJ postsurgical outcome assessment and rehabilitation progress with a simple instrument.

Accuracy of medial to lateral transcondylar screw placement using a C-guide for the treatment of humeral intracondylar fissure

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OBJECTIVES
To retrospectively compare the position of transcondylar screws on post-operative Computed Tomography (CT) scans with the ideal position planned using a previously defined technique.

METHODS
A retrospective study of 24 elbows of 18 dogs treated for humeral intracondylar fissures, using a 4.5 mm screw inserted from medial to lateral. Humeral condyle diameter was measured from the CT. Planned entry and exit points of the transcondylar screw were 0.3 x humeral condyle diameter cranial and 0.2 x humeral condyle diameter distal to the medial epicondyle and 0.3 x humeral condyle diameter cranial and 0.3 x humeral condyle diameter distal to the lateral epicondyle. Following a medial approach, a C-shaped drill guide was used.

STATEMENT (CONCLUSIONS)
These data suggest that marine-based PCSO-524 alone, and the combination of firocoxib and PCSO-524 are equally beneficial in treating dogs with osteoarthritis, but patients, may have a lower risk of side effects with PCSO-524.