Assessment of the effects of gabapentin on activity levels and owner-perceived mobility impairment and quality of life in osteoarthritic geriatric cats - PubMed

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Abstract

OBJECTIVE Toevaluate effects of gabapentin on activity levels and owner-perceived mobility impairment and quality of life (QOL) in osteoarthritic geriatric cats. DESIGN Blinded, placebo-controlled, randomized crossover-design study. ANIMALS 20 osteoarthritic cats (≥ 10 years old). PROCEDURES Cats received gabapentin (10 mg/kg [4.5 mg/lb]) or placebo treatment, PO, every 12 hours for 2 weeks, followed by the alternate treatment (with no washout period). Activity was assessed with a collar-mounted accelerometer. A client-specific outcome measure (CSOM) questionnaire was used weekly to collect owner assessments of 3 selected activities in which their cats had impaired mobility; QOL ratings (worse, the same, or improved) following crossover to each treatment and for the overall study period were collected at the end of the investigation. Activity counts, CSOM and QOL data, and deterioration in impaired activities (ie, decrease of ≥ 2 points in CSOM scores) associated with treatment crossover were assessed statistically. Adverse events were recorded. RESULTS Gabapentin administration was associated with significantly lower mean daily activity counts (48,333 vs 39,038 counts/d) and significantly greater odds (approx 3-fold change) of

CSOM ratings indicating improvement in impaired activities, compared with results for the placebo treatment. A greater proportion of cats had deterioration in impaired activities after the crossover from gabapentin to placebo than when the opposite occurred, but the proportion of cats with worsened QOL did not differ between sequences. Adverse events were noted for 10 cats (9 that completed the study) during gabapentin treatment (sedation, ataxia, weakness, and muscle tremors) and 1 cat during placebo treatment (lethargy). CONCLUSIONS AND CLINICAL RELEVANCE Gabapentin treatment was associated with improvement in owner-identified impaired activities of osteoarthritic cats. Activity levels were lower than those during placebo treatment, and sedation was the most common adverse effect.

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