Efficacy of a chlorhexidine gluconate-coated dental chew (C.E.T.® HEXtra®) in the prevention of dental calculus in Dogs

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VETERINARY DENTAL FORUM

Conflict of interest: The authors are employees of the company Virbac SA

Introduction

At-home daily dental hygiene is essential to prevent the formation of calculus in dogs. As a complement to tooth-brushing, or when the latest is not possible in particular because of compliance issue, dental chews can be useful. In addition to their natural abrasive cleansing action, C.E.T.® HEXtra® chews (Virbac Corp., USA) are coated with a solution of chlorhexidine gluconate, a well-known antiseptic agent, to help reduce plaque and calculus.

The objective of this study was to determine the efficacy of C.E.T.® HEXtra® chews in the prevention of dental calculus in adult Beagle dogs.

Materials and Methods

Dog's assignment and experiment's timeline are described in figure 1.
Calculus-combined and calculus-gingival mean scores (modified Warrick-Gorrel Method) were performed under general anaesthesia for each dog by a single scorer, who had 20 years of experience assessing and grading in veterinary dental research. The scorer was blinded to the group assignments.

For the calculus-combined and calculus-gingival mean scores, Student's test was used to assess the difference between the 2 groups at the 5% significant threshold.

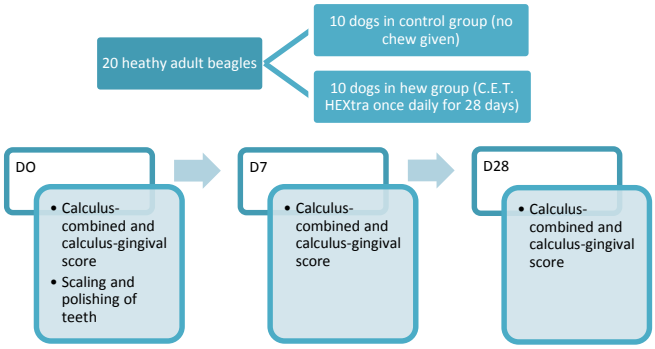

Figure 1: Dog's assignment and experiment's timeline

Results

Over the course of the study no undesirable effects were noted.

Results of calculus-combined and calculus-gingival mean scores on day 28 for the two groups are presented in figure 2.

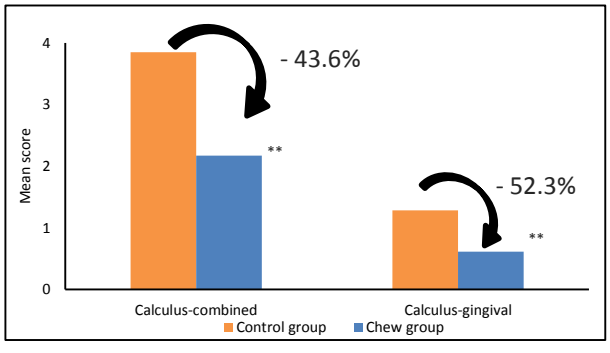

Figure 2: Calculus-combined and calculus-gingival mean scores in the control group and the chew group at day 28.
**: p<0.05 according to Student's t-test and Dunnett's t-test

Discussion and conclusion

This study confirmed that daily use of C.E.T.® HEXtra® chews in Beagle dogs is associated with a significant prevention in calculus formation after 28 days.

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