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Doxirobe™ and Clindoral™ are products that have been around for many years. They are composed of antibiotic (doxycycline and clindamycin respectively) in an absorbable gel base and are intended to be used as a local antibiotic placed into *properly prepared* periodontal pockets as adjunctive therapy when trying to preserve teeth with moderate periodontal disease. I have used Doxirobe™ and its human cousins (Arestin™, Atridox™ and Artrisorb™) occasionally (a few times a year) over the past twenty years or so.

Based on the results of a recent study (abstract below), I can no longer justify or recommend the use of these products, either in my hands or in those of general practitioners. While some studies have shown statistically significant differences between treatment and control, this study concludes that these differences are of no clinical relevance and so there is no benefit to the tooth or the patient in using these products in dogs.

## Abstract

### Journal of the American Veterinary Medical

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### Comparison of closed root planing with versus without concurrent doxycycline hyclate or clindamycin hydrochloride gel application for the treatment of periodontal disease in dogs

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**OBJECTIVE** To compare improvements in values for periodontal disease indices in dogs following treatment with closed root planing (CRP) alone, CRP with concurrent 8.5% doxycycline hyclate gel application, and CRP concurrent 2% clindamycin hydrochloride reverse-polymer hydrogel application.

**DESIGN** Randomized, blinded, controlled clinical trial.

**ANIMALS** 34 client-owned dogs with periodontal pockets measuring 3.5 to 5.5 mm deep.

**PROCEDURES** Dogs were randomly assigned to receive 1 of 3 treatments: CRP alone (n = 10) or CRP plus 8.5% doxycycline hyclate (12) or 2% clindamycin hydrochloride (12) gel applied within the periodontal pockets. Indices of periodontal disease severity were recorded before and 12 weeks after treatment, and outcomes were compared among treatment groups.

**RESULTS** Except for gingivitis index, no significant differences were identified among the 3 treatment groups in the amount of improvement observed in values for periodontal disease indices following treatment. A minor but clinically unimportant improvement in mean gingivitis index values was identified for dogs treated with CRP plus doxycycline gel, which differed significantly from improvements in the other 2 groups. Teeth that were initially more severely affected (pocket depths, 5.0 to 5.5 mm) had the greatest amount of improvement, whereas teeth with only mildly high initial pocket depths (3.5 to 4.0 mm) had less improvement.

**CONCLUSIONS AND CLINICAL RELEVANCE** Overall, addition of doxycycline or clindamycin gel application to CRP for the treatment of periodontal disease in dogs yielded no clinically relevant benefit over CRP during the 12-week follow-up period.

In most cases, teeth that might be considered candidates for these products would likely best be extracted. Remember, the objective is to provide our patients with a mouth free of pain and infection. I talk about that more in this paper - [http://www.toothvet.ca/PDFfiles/Things\\_I\\_tell\\_clients.pdf](http://www.toothvet.ca/PDFfiles/Things_I_tell_clients.pdf).

Regards,

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