

DERMATOLOGICAL **USABILITY STUDY** OF THE EAR CLEANER **NACOTIL®** IN VETERINARY MEDICINE

INTRODUCTION

Otitis is a common disease in canine veterinary medicine (20%), characterized by inflammation of the epithelium of the ear canal and of the pinna. **In this study, we looked at the cleaning pre-treatment** that promotes the action of the active substances by acting as a cleaner, anti-septic and ceruminolytic and preventing the formation of adhesions and mucus.

AIM

To determine the **level of veterinarian satisfaction with coadjuvant treatment with Nacotil®**, which contains N-acetylcysteine, boric acid, hyaluronic acid, zinc gluconate and Citrus Medica Limonum essential oil, as an ear cleaner in acute and chronic canine otitis.

MATERIALS AND METHODS

- 40 dogs of different breeds aged 1–8 years.
- 18 participating veterinary centers throughout Spain.

• Groups:

Group A: 23 dogs with acute otitis with (bacterial or fungal) overgrowth.

Group B: 17 dogs with chronic or recurrent bacterial otitis.

• Treatment:

Group A: 2-5 cc Nacotil® was administered, depending on the size of the animal, every 48 h for 21 days.

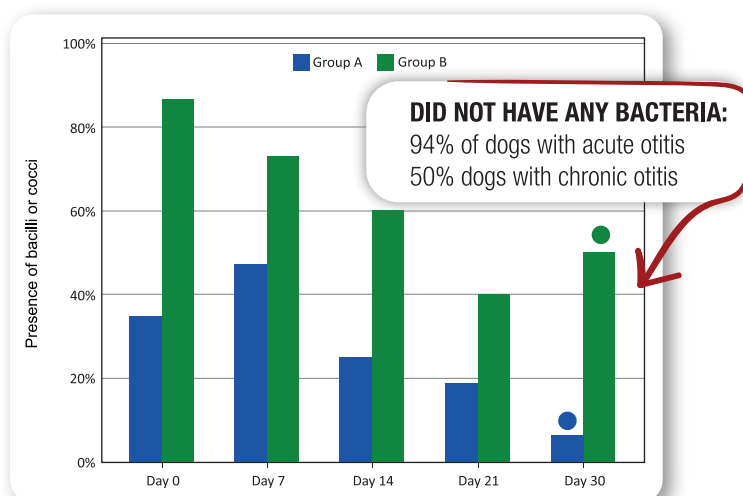
Group B: 2-5 cc Nacotil® was administered, depending on the size of the animal, every 24 h, 30 min before the use of a concomitant treatment, for 21 days

- 4 follow-up visits on days 0, 7, 14 and 21.
- 1 additional visit after 30 days to evaluate the residual effect of the treatment.
- Clinical evaluation (presence of erythema, amount of cerumen/secretion, presence of ulcers, glandular hyperplasia) and cytological evaluation on days 0, 7, 14, 21 and 30.
- Evaluations during the visit on day 30 (using the Likert scale):

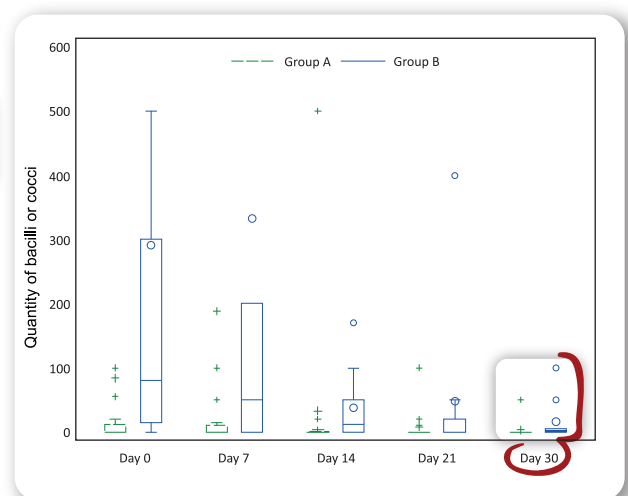
The animal's tolerance to the cleaning treatment, ease of use, product dosage, organoleptic characteristics of the product (smell, texture, color), satisfaction of the veterinarian and the owner, the owner's compliance with the treatment, and advantages of the product compared to other previously used cleaners.

RESULTS

Presence of bacilli or cocci



Quantity of bacilli or cocci (box plot)



A residual effect is observed in acute, and chronic or recurrent otitis 10 days after treatment with Nacotil®.

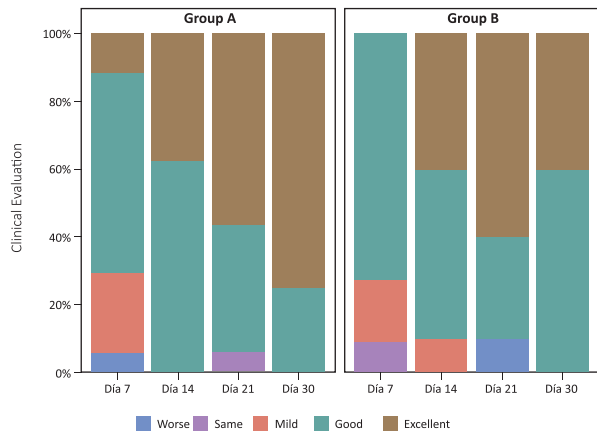
Statistically significant reduction ($p < 0.005$)

Group A: dogs with acute otitis

Group B: dogs with chronic or recurrent otitis

The quantity of bacteria in all cases treated with Nacotil® is insignificant 10 days after the treatment.

Statistically significant reduction ($p < 0.0001$)



Clinical Evaluation

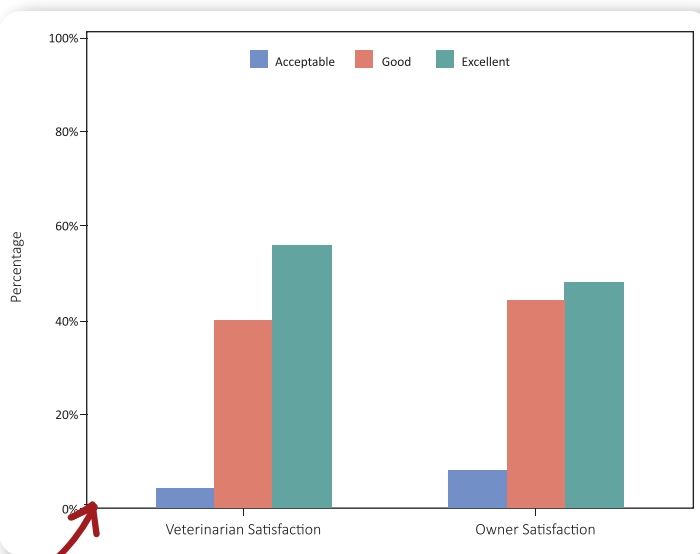
10 days after treatment with Nacotil®, the overall clinical evaluation was good or excellent in all cases, with it being considered excellent in 75% of acute cases compared to 40% of chronic cases ($p < 0.05$).

Group A: dogs with acute otitis

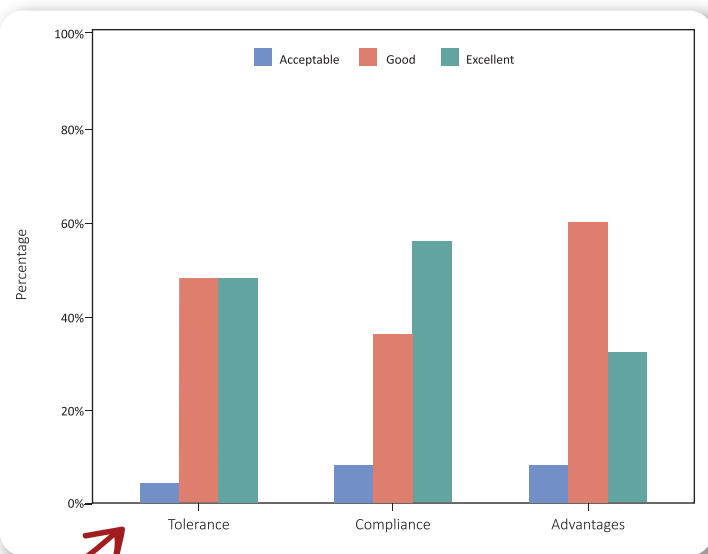
Group B: dogs with chronic or recurrent otitis

Evaluation during the day 30 visit

All the parameters evaluated during the final evaluation of Nacotil® are classified as good or excellent.



94% in both groups were satisfied or very satisfied with the product's effect.



92% of veterinarians:

Consider the product to have advantages compared to other cleaners
Observe good or excellent tolerance by the animal.

92% of owners:

Comply with the full treatment.

CONCLUSIONS

- **Nacotil®** has demonstrated that **it can help eliminate pathogens by acting as a cleaning agent, antioxidant and bacterial biofilm disruptor in canine otitis.**
- **Nacotil®** can be used as a **new coadjuvant cleaning treatment in both acute and chronic canine otitis externa**, particularly in cases diagnosed with presence of biofilms, with significant clinical benefits and clear owner and veterinarian satisfaction.
- **The use of Nacotil® daily for a minimum of 3 weeks** is recommended. In recurrent cases, consult your veterinarian about the maintenance regimen to be followed after that period.
- No adverse effects have been reported.

REFERENCES

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