

# Recommendations for Feline Ectoparasiticides

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**Some transmitted pathogens also pose a zoonotic risk to humans.**

## In the literature

Lavan R, Armstrong R, Normile D, Vaala W. Adherence to veterinary recommendations for ectoparasiticides purchased by cat owners in the USA. *Parasit Vectors*. 2020;13:541.

## FROM THE PAGE ...

Flea and tick infestations can cause clinical disease and have the potential to transmit infectious and zoonotic pathogens.<sup>1,2</sup> Abundant safe and effective flea and tick control options should be available at the clinic. Pet owner compliance with treatment recommendations is critical because reduced compliance can lead to treatment failure and persistent infestation.

This study\* evaluated duration of coverage of 3 flea and tick treatment products purchased by cat owners in the United States: a 12-week administration product containing fluralaner, a monthly product containing fipronil/(S)-methoprene/pyriproxyfen, and a monthly product containing imidacloprid/pyriproxyfen. All were labeled for flea control; fluralaner and fipronil/(S)-methoprene/pyriproxyfen were also labeled for tick control. The study aimed to evaluate whether the 12-week treatment interval resulted in a different duration of coverage than monthly administration. Transactional records from a commercial database derived from practice management software were obtained and analyzed. The database included the purchasing records of cat owners over a 30-month period from 2017 to 2019 from 671 veterinary clinics; 41,630 cats were represented. Owners purchased a yearly average of 1.5 doses of fluralaner (providing 4.2 months of treatment coverage), 3.6 doses of fipronil/(S)-methoprene/pyriproxyfen, and 2.8 doses of imidacloprid/pyriproxyfen. The authors concluded that the 12-week administration interval provided 17% or 50% longer annual protection than fipronil/(S)-methoprene/pyriproxyfen and imidacloprid/pyriproxyfen, respectively.

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▲ **FIGURE 1** Fleas and flea feces on a cat. Image courtesy of Simone Morelli, University of Teramo



▲ **FIGURE 2** Tick feeding on a cat. Image courtesy of Ilaria Russi, University of Teramo

## ... TO YOUR PATIENTS

Key pearls to put into practice:

- 1** Fleas and ticks are key ectoparasites in cats, and although vector-borne diseases are more common in dogs, cats are also affected. Some transmitted pathogens also pose a zoonotic risk to humans.
- 2** Educating cat owners on the importance of using flea and tick preventives is imperative, regardless of the recommended/prescribed product. Clinicians should also consider following recognized guidelines (eg, from the Companion Animal Parasite Council) in order to safeguard patient health and minimize risks for humans.
- 3** Many marketed ectoparasiticides have efficacy against both fleas and ticks. Recommendations should be made based on individual patient considerations, including geographic location. In addition, owner compliance should be considered, as it has an impact on the reliability of ectoparasite control programs.

## References

1. Lappin MR. Update on flea and tick associated diseases of cats. *Vet Parasitol.* 2018;254:26-29.
2. Traversa D. Fleas infesting pets in the era of emerging extra-intestinal nematodes. *Parasit Vectors.* 2013;6:59.

## Research Note: Association Between Clinical Abnormalities & Tissue Damage in Blocked Cats

This retrospective study reported the gross and histopathologic postmortem findings of the urinary tract in 14 cats with a history of urinary obstruction and compared results with the clinical severity of disease. Gross and histopathologic bladder and renal lesions were common, with renal lesions typically consisting of tubulointerstitial nephritis and lymphoplasmacytic infiltrate. The severity of urethral lesions was not associated with the severity of bladder lesions; however, the degree of serum hyperkalemia was associated with the severity of bladder and kidney lesions. An association between severity of bladder lesions and degree of azotemia could not be determined because of the study's small sample size and exclusion of those cats with the highest levels of azotemia.

### Source

Mauro KD, Bradley CW, Drobatz KJ. Postmortem urinary tract changes in cats with urethral obstruction. *J Vet Emerg Crit Care.* 2021;30(2):187-193.