New option for treating canine demodectic mites

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LAS VEGAS — Just about every veterinarian has treated a patient with demodicosis that was difficult to manage, according to Wayne Rosenkrantz, DVM, DACVD, who spoke here at a Western Veterinary Conference session on ProMeris, sponsored by Fort Dodge Animal Health.

ProMeris for Dogs, a spot-on anti-parasitic for flea and tick control, recently received labeling approval for demodectic mites. The canine formulation contains metaflumizone and amitraz (the feline formulation does not contain amitraz). The EPA labeling is for once-a-month application.

In one study on metaflumizone–amitraz treatment for demodicosis, 16 stray dogs in South Africa received 20 mg/kg of both metaflumizone and amitraz. The dogs were divided into two treatment groups: The first group received therapy every 28 days and the second group every 14 days. “The response rate and mite reduction numbers were quite impressive — 94% to 99%, respectively, with improvement of clinical signs,” said Rosenkrantz, who is co-owner and partner of Animal Dermatology Clinic in Tustin, Calif.

Rosenkrantz and his group conducted a pilot study in the United States on 24 dogs — 13 with juvenile-onset disease and 11 with adult-onset disease. The animals ranged from 6 months to 2.9 years of age, with an average of 1.6 years. A number of predisposed breeds — boxer, bulldog and Boston terrier — were represented, as were other breeds. The adult-onset group had a variety of concurrent conditions. “All dogs had severe signs,” Rosenkrantz said, adding that most had been unable to handle traditional therapies for demodectic mites.

“All of the dogs were treated with the standard dose. We did not do a 28-day versus 14-day interval. We did a straight 14-day cycle. We wanted to see two consecutive negative skin scrapings. We evaluated the dogs every 30 days, and the range of treatment was between 90 and 180 days,” he said.

An excellent response was two negative skin scrapings; a good response was 75% reduction in mite numbers; a fair response was 50% reduction; and a poor response was no change. “We counted eggs, larvae, nymphs and adults, and we calculated live-dead ratios,” Rosenkrantz explained.

The same sites were scraped on follow-up visits. Because many dogs with demodicosis have secondary pyoderma, any dog that started the study on antimicrobials was allowed to continue with the therapy.

Of the 13 dogs in the juvenile-onset group, researchers saw a 92.3% reduction, which is an excellent response. One dog did not respond to metaflumizone–amitraz or to the previous ivermectin and moxidectin treatments, Rosenkrantz said.

In dogs that did respond, a reduction in erythema and alopecia was evident, as were hair regrowth and general improvement.
"As expected, we’re not going to realize as high of a cure rate in dogs with adult-onset demodicosis, as they often are plagued by an immunodeficiency or complication. But 5 of our 11 dogs had an excellent response. Three of 11 were good responders, and 3 were poor responders, showing little or no response,” he said.

The biggest complaint from owners was the product odor, Rosenkrantz said, and he recommended that owners keep their dog outdoors for 3 to 6 hours after application or until the odor subsides.

Other side effects included transient lethargy (two dogs), diarrhea (two dogs), vomiting (one dog) and exfoliation at the application site (one dog). “Histopathology showed a subcorneal acantholytic pustular reaction consistent with a pemphigus foliaceus-like drug reaction,” he said.

He suggested stopping the product if any topical eruption occurs.

“At this point, the incidence of reactions is low and is not influencing my use of the product,” he said. “This is becoming one of my first-choice products to use in demodicosis cases because one, it’s approved, and two, it is effective and gives additional parasiticidal activity for fleas and ticks.”

Some dogs with adult-onset demodicosis are likely to have a chronic relapsing problem. They could be placed on this product once a month as general parasiticidal treatment, he added. “That can control fleas and ticks and keep the Demodex infestation under control.”

Still, long-term data are lacking. “In our study, all dogs in the excellent groups have not relapsed, but we need to follow them longer because we don’t have a 2-year follow-up to see how many stay in remission, which is an important point that has not been answered yet.”

Only one other product is labeled for the treatment of demodicosis: amitraz (Mitaban, Pfizer Animal Health). Ivermectin, the avermectin class of drugs and moxidectin have been used off-label and have worked well.

Dr. Rosenkrantz reported a financial relationship with Fort Dodge Animal Health, which supplied ProMeris for this study.

For more information: