Staph Bacterins: A Treatment for Idiopathic Pyoderma?

There are two major categories of canine bacterial pyoderma: primary and secondary. Secondary bacterial pyodermas are the most common; the primary, or idiopathic, pyodermas are believed to occur as a result of an immune deficiency in the skin. There is no recognizable underlying trigger. In this study, 10 dogs with recurrent episodes of bacterial pyoderma were screened for underlying causes and were diagnosed with “idiopathic pyoderma” if no cause was found. Autogenous bacterins were made from bacterial cultures obtained from dogs in the study. Dogs were randomly assigned to a control or a treatment group, and the investigators were blinded to allocation. All dogs received antibiotics for the first 4 weeks of a 10-week trial. The treatment group received concurrent subcutaneous injections of an autogenous bacterin for the entire 10-week trial. The dogs were examined by the investigators at 0, 5, and 10 weeks and scored for number and types of lesions, distribution of lesions on the body, and severity of infection. At the end of antibiotic therapy, there was no difference between the 2 groups; however, at the end of the trial, there was a significant difference between the treated and untreated groups with respect to individual lesion scores and the sum of the lesion scores. No adverse reactions were reported in the treatment group.

COMMENTARY: It is important to note that this is a pilot study; however, the findings are encouraging because they show that autogenous bacterins may be a safe alternative therapy for dogs with idiopathic recurrent pyoderma. Currently, the most commonly used bacterin is a Staphylococcus aureus-based bacterin (SPL; Staphage Lysate, Delmont Laboratories). Autogenous bacterin production is not readily available in clinical practice, but the findings of this study suggest that a commercially available S. intermedius bacterin may be promising in the control of idiopathic bacterial pyoderma. Current treatment options include life-long antibiotic therapy, pulse therapy, and antibiotic-SPL therapy with concurrent topical antibacterial shampoo treatment. Management is difficult because therapy is time-consuming and expensive.

—Karen A. Moriello, DVM, Diplomate ACVD

Masked, controlled study to investigate the efficacy of a Staphylococcus intermedius autogenous bacterin for the control of idiopathic recurrent superficial pyoderma. Curtis CF, Lamport AI, Lloyd DH. VET DERMATOL 17:163-168, 2006.