Changing Resistance Patterns of *Staphylococcus*

Staphylococcal species are frequently isolated from the skin of healthy and diseased dogs, with *S. intermedius* being the most predominant. *S. intermedius* is one of the causative agents of canine bacterial skin infections, including otitis externa, pyoderma, and abscesses. In this Polish study, 24 *Staphylococcus* isolates from canine dermatitis cases in 1 city were evaluated for their phenotypic and genotypic properties. Of these, 17 were identified as *S. intermedius*. The other species included *S. chromogenes*, *S. sciuri*, *S. aureus*, *S. saprophyticus*, *S. epidermidis*, and *S. capitis*. All but one of the *S. intermedius* isolates and an *S. sciuri* isolate were β-hemolytic, which is a common property found in strains isolated from diseased canine skin. The *S. intermedius* isolates were found to be biochemically homogenous but genetically diverse. Antibiotic resistance was common in all of the isolates, with 87.5% showing resistance to at least 1 of 10 drugs tested. The antimicrobials with the most activity against all staphylococci were amoxicillin–clavulanic acid, cephalexin, and gentamicin. Resistance to carbenicillin, amoxicillin, ampicillin, cephadroxil, erythromycin, and neomycin was common. The authors did not observe any correlation between antibiotic resistance and occurrence of plasmids. This study confirmed that a great variety of resistance patterns exist in staphylococci depending on the country of isolation.

**COMMENTARY:** The reported culture and sensitivity findings in this study were very similar to those reported in the United States until recently. None of the strains in this study were methicillin resistant—it will be interesting to monitor how quickly resistance occurs in Poland and other countries where these studies are now being conducted. Methicillin-resistant staphylococci were once uncommon, but with increased travel of dogs and widespread availability of broad-spectrum antibiotics, this is a real concern.—Karen A. Moriello, DVM, Diplomate ACVD