

Superficial Bacterial Folliculitis

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In the Literature

Larsen RF, Boysen L, Jessen LR, Guardabassi L, Damborg P. Diversity of *Staphylococcus pseudintermedius* in carriage sites and skin lesions of dogs with superficial bacterial folliculitis: potential implications for diagnostic testing and therapy. *Vet Dermatol*. 2018;29(4):291-e100.

FROM THE PAGE ...

In this study, samples for bacterial culture were obtained from 14 dogs with superficial bacterial folliculitis. Samples were obtained from 4 to 6 skin lesions per dog and from the gingiva and perineum, both of which are carriage sites for *Staphylococcus pseudintermedius*. Skin lesions sampled included pustules, papules, crusts, and epidermal collarettes.

S pseudintermedius isolates were subjected to pulsed-field gel electrophoresis and antimicrobial susceptibility testing to assess the genetic diversity of the isolates. Pustules and papules were associated mostly with pure cultures of *S pseudintermedius*, whereas crusts and collarettes were often associated with multiple bacterial species, likely due to contamination from the environment or surrounding skin. Extensive *S pseudintermedius* strain diversity was observed, with multiple distinct strains isolated from 6 of 14 dogs. Up to 4 strains with varying antimicrobial resistance profiles were detected in one dog. Most dogs (12/14) carried the strain associated with infection on either the perineum or gingiva; this supports the view that dogs are typically infected with their own strains of *S pseudintermedius* rather than as a result of transmission from another animal.

... TO YOUR PATIENTS

Key pearls to put into practice:

- 1** Pustules and papules are recommended as the first choice for culture testing, as there is less chance for contamination from strains of *S pseudintermedius* that are not involved in the infection. Papules and pustules should both be sampled by gently incising the lesion with the tip of a sterile needle, then cultured.
- 2** Laboratories usually select a single bacterial colony of the predominant species growing on the agar plate for susceptibility testing. This may cause strains involved in the infection to be missed, which may result in treatment failure. It is recommended that laboratories evaluate their methodology for antimicrobial susceptibility testing.
- 3** Responsible antimicrobial stewardship is critical. Clinicians should culture animals with superficial bacterial folliculitis if initial empiric treatment fails. Topical therapy is also important, as many superficial skin infections can be resolved using only topical chlorhexidine products.