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AT A GLANCE

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Behavior - Neurology

Dogs Tune to Slower Speech Rhythms Than Humans

Dogs appear to understand speech through a slower temporal rhythm than humans do, with neural tracking centered in the delta range (1-3 Hz) rather than the theta range (4-7 Hz). The study found that dogs vocalize at about 21.1 calls per second, while adult-directed speech is faster at about 41.9 syllables per second, and human-to-dog-directed speech falls in between at about 31.6 Hz.

Behaviorally, dogs responded best when speech preserved both content and its natural intonation and rhythm, and comprehension worsened as speech rate increased. The authors concluded that humans naturally slow and modify speech toward dogs in a way that better matches dogs' sensory-motor timing, which may improve communication efficiency.

[De'aux EC, et al. \(2024\) Dog-human vocal interactions match dogs' sensory-motor tuning. PLoS Biol 22\(10\): e3002789](#)

[PLOS. "Who's a good boy?" Humans use dog-specific voices for better canine comprehension." ScienceDaily. ScienceDaily, 1 October 2024](#)
[Cap Rep \(2026\).44\(9\):1](#)

Dermatology

Canine Pyoderma Guidelines

General

A consortium of 10 dermatologists from across the world developed these recent guidelines for treatment of canine pyoderma with emphasis on antimicrobial stewardship. Antimicrobial selection in canine pyoderma is determined by lesion depth, cytological findings, bacterial culture and susceptibility (C/S) results, and recurrence risk. Topical antiseptics constitute first-line therapy for surface and

Principles

superficial pyodermas. Systemic antimicrobials are reserved for deep pyodermas and for superficial cases that fail topical therapy or where topical application is impractical. A primary underlying dermatosis is invariably present; idiopathic pyoderma is not recognized.

Classification of Canine Pyoderma

Surface: Pyotraumatic acute moist dermatitis (hot spots), **intertrigo** (skin fold dermatitis) and **Bacterial OverGrowth Syndrome (BOG)**. Mixed microbial populations (Gram-positive cocci, Gram-negative rods, yeasts including *Malassezia*) are common. Although not a true pyoderma due to the absence of inflammatory cells, BOG presents with nonspecific lesions (erythema, hyperpigmentation, lichenification) primarily affecting the ventral abdomen, interdigital spaces, and pinnae. Cytology shows large numbers of bacteria without significant neutrophils or macrophages.

Superficial: Superficial bacterial folliculitis (SBF), exfoliative (spreading) pyoderma, impetigo, mucocutaneous pyoderma. The most commonly seen superficial pyoderma is **superficial bacterial folliculitis** which progresses from erythematous follicular papules to pustules, which subsequently rupture to create epidermal collarettes with erythematous peripheral rings surrounding healing centers that may exhibit hyperpigmentation and eventually leading to focal alopecia. **Exfoliative superficial pyoderma** (formerly superficial spreading pyoderma) is characterized by large, expansile epidermal collarettes resembling target lesions. It is particularly common in Shetland Sheepdogs, Australian Shepherds, German Shepherd Dogs, and Collies, although other breeds may be affected. **Impetigo** of puppies presents with large pustules without concurrent erythematous papules. **Bullous impetigo** is more commonly seen associated with Cushing's syndrome.

Mucocutaneous pyoderma is a poorly characterized

