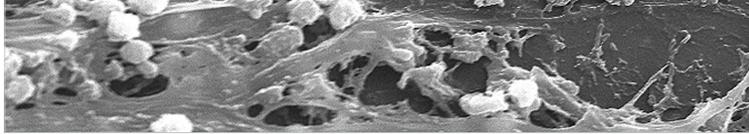


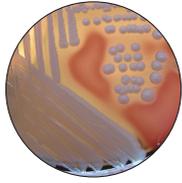
PYODERMAS



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DESCRIPTION

Pyoderma is the term applied to bacterial infections that involve the skin. Pyodermas may be primary of secondary, superficial or deep. The disease is recognized as part of several distinct clinical syndromes.



PRIMARY PYODERMAS

Primary pyoderma is often idiopathic in nature (occurring without any predisposing cause), usually in healthy animals, but may be a result of suppressed or compromised immune states. If bacterial infection is involved it is usually one organism as opposed to mixed or more than one organisms such as in deep pyodermas.

In primary or surface pyodermas the most frequent bacteria cultured is staphylococcus, a Gram-positive cocci bacterium. Staphylococcus is commonly found in the nasopharynx, lower GI tract, and as a natural resident on the fur and skin of rats.



SECONDARY PYODERMAS

Secondary pyoderma is primarily caused by conditions that involve bacterial infection below the epidermal layer of skin. Some conditions that can contribute to the presence of secondary pyoderma are ectoparasite infestations, fungal infections, atopic or contact type allergic responses, a weakened immune system as a result of poor nutrition or prolonged steroid use, cancer, or endocrine diseases like diabetes, hypothyroidism, or hypoadrenocorticism. The same is true of Superficial Pyoderma.



SUPERFICIAL PYODERMAS

Clinically seen diseases in the superficial pyoderma category include acute moist dermatitis (hot spots), impetigo, acne, and skin-fold pyodermas. The lesions typically involve only the superficial epidermis, with healing occurring without scarring. The disease is usually of short duration. The animal is rarely systemically ill. The skin around the lesion remains normal, whereas the affected portions may be ulcerated or traumatized by the animal.



DEEP PYODERMAS

The deep pyodermas present a greater challenge clinically than do the superficial infections. Deep pyodermas tend to become chronic infections, often resistant to treatment. It has been speculated that these pyodermas may occur in animals with some degree of immunosuppression or allergy. A great many of these cases involve the microorganism *Staphylococcus intermedius*, previously known as *S. aureus*, which produces toxins and enzymes that cause severe tissue damage. Diseases seen clinically include juvenile pyoderma (puppy strangles), interdigital pyoderma (interdigital cysts), and generalized pyoderma (German Shepherd pyoderma). The clinical signs and treatments of all deep pyodermas are similar.

SYMPTOMS



Symptoms associated with pyoderma are:

- Itchiness
- Inflamed and reddened areas on the skin
- Patches of yellow colored skin
- Discharge from skin lesions
- Foul smelling odor from the skin
- Hair loss over affected areas.

TRANSMISSION



Dogs can develop bacterial infections when the skin is damaged or wounded. Bacterial pyoderma is a type of skin infection that can occur with skin damage.

Causes of skin damage which increases susceptibility to pyoderma include:

- Fleas,
- Scratching from allergies,
- Dry skin,
- Ringworm,
- Sarcoptic or demodectic mange
- Topically applied irritating substances, including many flea sprays and dips.

Animals that develop recurrent pyoderma often have poorly functioning immune systems that prevent their body from fighting off these infections like a normal animal. They may suffer from concurrent diseases such as hypothyroidism or adrenal disease.

PYODERMAS CONTINUED

DIAGNOSIS



Diagnosis of pyoderma involves a complete examination of all body systems. A routine blood screen will likely be necessary.

Specific skin tests may include skin scrapings to identify mites which cause mange, fungal cultures to diagnose or rule out ringworm, bacterial cultures to identify the type of bacteria infecting the lesion, cytology to evaluate individual cells within the skin lesion, and/or “allergy testing” to identify potential allergens (substances producing allergies).

TREATMENT



Pyoderma requires intensive, conscientious treatment, sometimes for prolonged periods of time. Some pets may require life-long medications to keep the problem under control. Some cases may even be incurable.

Your veterinarian will need to assess the condition of your pet and determine if any underlying causes are present in order to determine the appropriate form of treatment.

Treatment of the pyoderma may include antibiotics given either systemically (by injection or by mouth) or used topically.

Special antibiotic shampoos, ointments, creams and/or sprays may also be recommended by your pet’s veterinarian, depending on the situation.

If underlying problems (such as fleas, allergies, ringworm, mange, etc) are discovered, these will need to be treated as well.

PREVENTION



The best way to prevent pyoderma is to address any underlying diseases, follow good basic hygiene techniques, and employ appropriate animal husbandry practices.