



Bloom Animal Hospital, P.C.

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Allergy, Skin & Ear Clinic for Pets

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PYODERMA

Pyoderma is a bacterial infection of the skin which may involve different layers. Superficial pyodermas are within the skin near the surface and can often be recognized by the presence of circular crusting lesions or red pimples. Deep pyodermas occur when bacteria invade structures beneath and beyond the hair follicle. This can be recognized in most cases because pus can be expressed from the skin lesions.

Staphylococcus pseudintermedius is considered to be the prime bacterial pathogen of the skin. The bacteria rarely infect normal skin, but can if there are injured or inflamed skin surfaces.

The development of a pyoderma depends upon several factors. The most important is the host's response to bacterial invasion. Some of the more common causes of recurrent or deep pyodermas are:

1. Drug induced (i.e. cortisone)
2. Immune deficiency or depression
3. Hormonal (i.e. hypothyroid, Cushings disease)
4. Atopic dermatitis (pollen allergy, flea allergy, food allergy)
5. Parasitic (i.e. demodicosis, scabies, fleas)
6. Keratinization abnormalities (i.e. Seborrhea)
7. Immune-mediated (i.e. pemphigus, Lupus)
8. Fungal (ringworm)
9. Staph hypersensitivity (allergy to their own bacteria)
10. Neoplasia (cancer)

The work-up for a pyoderma is quite variable and depends on the severity and duration of the problem, previous response to treatment, and initial clinical impression. The work-up may include:

<u>TEST</u>	<u>INDICATIONS</u>
1. Skin smear -	Type of bacteria, allergy, immune mediated
2. Skin scrapings -	Parasites
3. Fungal culture -	Ringworm
4. Skin biopsies -	Hormonal, immune mediated, allergy, fungal, bacterial, parasitic
5. Urinalysis -	Internal diseases
6. CBC, blood panel -	Internal diseases
7. Thyroid panel -	thyroid gland abnormality
8. Cortisol panel -	Adrenal gland abnormality
9. Culture -	Type of bacteria and antibiotic to use
10. Histamine test -	Drug interference
11. Skin testing -	Atopy (pollen allergy)

Treatment for pyodermas also can be quite variable. Correction or control of the underlying cause is one of our goals. All pyodermas will need to be on antibiotics for a MINIMUM of 21 days. Topical therapy is often indicated in the form of special shampoos.

The prognosis for most superficial pyodermas is good. The deep pyodermas are much more difficult to cure/control. The information gained from the laboratory tests will give us a more precise diagnosis and prognosis. Occasionally, after all of the causes have been eliminated, the pyoderma returns. In these cases, immune stimulating drugs will be tried.

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