Skin Infection in Cats – Causes, Symptoms & Treatment

What is pyoderma?

Also known as *pyoderma* (which stands for *pus in the skin*) skin infections are relatively uncommon in cats. Most are secondary, which means they are caused by an underlying disorder. Anything that affects the integrity of the skin has the potential to lead to a skin infection. Most often this is caused by trauma (such as a bite or scratch), self-mutilation (over grooming but more often than not, damage due to biting or scratching itchy skin due to an allergic reaction, hypersensitivity, parasites), endocrine disorders and poor immunity.

Pyoderma can affect the superficial or deeper layers of the skin. *Staphylococcus pseudointermedius* is the most common of bacteria to cause pyoderma in cats, other bacteria include *Pasteurella multocida*.

Shorthaired cats are more prone to developing skin infections, however, there is no age or sex predilection.

**Causes:**

As we have already mentioned, anything that irritates the skin can potentially lead to pyoderma. Common causes include:

**Allergy**

- Particularly food, inhalant or contact allergy which result in itching and irritation to the skin.

**Fleas**

- Some cats are particularly sensitive to the saliva of the flea, which results in a breakout of itchy papules on the skin.

**Ear mites**

- Spider-like mites which live in the ears of cats causing intense itching and discomfort.

**Ringworm**

- A fungal infection of the skin and claws, most cases of ringworm aren’t particularly itchy, but it can and does occur in some cats.
Seborrhea

- A condition caused by the overproduction of sebum, an oily substance produced by the sebaceous glands in the skin to protect and lubricate the skin.

Hypothyroidism

- A disease caused by an underactive thyroid gland.

Cushing’s syndrome

- A disorder caused by excessive production of cortisol by the adrenal gland. One symptom is a thinning of the skin, which can make it much vulnerable to damage.

Diabetes

- Type 2 diabetes is a condition in which the body’s cells don’t respond to insulin, a hormone which helps to move glucose into the cells. A side effect of diabetes is poor circulation and dry skin, both of which can cause itching, making it more vulnerable to infection.

Demodicosis

- Another type of mite which lives in the skin follicles or the surface layers of your cat’s skin. Immunocompromised or malnourished cats are most at risk. Itching leads to damage to the skin, making it prone to infection.

Feline acne

- Characterised by the presence of blackheads (comedones), particularly around the chin. These can become inflamed, leading to folliculitis, which is a form of skin infection of the hair follicles.

Skin folds

- Seen less often in cats than dogs, breeds with skin folds can develop pyoderma due to the skin trapping in moisture, in areas of folds, which provides the perfect environment for bacteria to proliferate. Prone areas include the nasal fold, vulval fold, and tail fold.

Symptoms:

Symptoms can vary between superficial and deep pyoderma. Also, the underlying cause will play a factor in how symptoms present. The symptoms below relate to skin infection only. Onset may be acute or slow to progress.

- Crusting and scaling, often with short hairs which can easily be pulled out
- Papules or pustules on the skin
- Alopecia (baldness)
Ulcerations or erosions which may ooze
- Unpleasant odour
- Pruritis (itching) may or may not be present, this can depend on the underlying cause

**Diagnosis:**

Your veterinarian will perform a complete physical examination of your cat and obtain a medical history from you, including accompanying symptoms you have noticed. He may be able to make a tentative diagnosis based on presenting symptoms alone. Tests your veterinarian will perform may include:

Cytology – Examination of cells from a pustule under a microscope. This can help to identify the infectious organism, which may be bacterial or fungal.

Culture and sensitivity – If bacteria is identified, a culture and sensitivity will be recommended. The bacteria are grown in a medium and then exposed to several types of antibiotic to determine which is the most effective in killing the bacteria.

**Diagnosing the underlying cause:**

Skin scrapings – To check for the presence of mites.

Fungal culture – To look for ringworm.

Hypoallergenic food trial – If a food allergy is suspected, your cat will be placed on a special diet see if the allergy clears up, if it does, he will then be put back on his normal diet to see if symptoms return.

Skin prick tests – A number of pricks are made in the skin containing allergens to common substances, the skin is then evaluated for a reaction to one or more of the allergens to identify possible allergies.

Endocrine tests – To evaluate for hypothyroidism or Cushing’s syndrome.

Complete blood count to evaluate the general health of your cat.

**Treatment:**

The goal of treatment is to treat the underlying cause as well as the skin infection itself.

**Treatment for skin infection:**

- Oral antibiotics which will usually run for 3-4 weeks.
- Topical antibiotics or antibiotic shampoos may also be necessary to help soften the crusts and treat the infection.

Treating underlying causes:
• **Allergies** – Avoidance of the allergen, if possible. Cats with food allergies will need to go on a *hypoallergenic* diet.

• **Fleas** – Diligent flea control, treat all cats as well as the environment as most of the flea life cycle in the environment, and not on the cat.

• **Ear mites** – Anti-parasitic medications such as Revolution.

• **Ringworm** – Anti-fungal medications, dips or shampoos.

• **Malassezia** – Medicated *antiseborrheic* shampoos every three days until the condition is under control.

• **Hypothyroidism** – Synthetic hormones to replace those not being made by the thyroid gland.

• **Cushing’s syndrome** – Surgical removal of the adrenal gland if a tumour is involved, or gradual withdrawal of corticosteroids if they are to blame.

• **Diabetes** – Dietary changes and or insulin injections.

• **Feline acne** – Keep the area clean with topical medications or witch hazel (for mild acne) and switch to glass or metal bowls.