# Scabs on Cats-Causes, Symptoms & Treatment

cat-world.com.au/causes-of-scabs-on-cats.html



# At a glance:

**About:** Scabs are dry, crusty lesions or pustules and may range from singular to multiple. The type of scabs, location and accompanying symptoms can all give your veterinarian an indication of the possible cause.

## Causes:

- Flea bite hypersensitivity
- Feline acne
- Allergies
- Mange
- Ringworm
- Pemphigus
- Abscess
- Skin infection
- Eosinophilic granuloma complex
- · Insect bite or sting
- Skin cancer

**Diagnosis:** Physical examination and medical history. Diagnostic tests may include skin scraping, skin cytology, analysis of the hairs, skin prick test and baseline tests to evaluate the overall health,

**Treatment:** Depends on the underlying. Antibiotics for infection, diligent parasite control, avoid the allergen if one is determined, medicated shampoos and dips and anti-inflammatory medication.

## **About**

Scabs are dry, crusty lesions or pustules and may range from singular to multiple. The type of scabs, location and accompanying symptoms can all give your veterinarian an indication of the possible cause.

Untreated, scabs can lead to secondary bacterial infections, so it is always important to have any scabs, lumps, bumps or rashes seen by a veterinarian.

# Causes

The cause of scabs can be divided into the following categories:

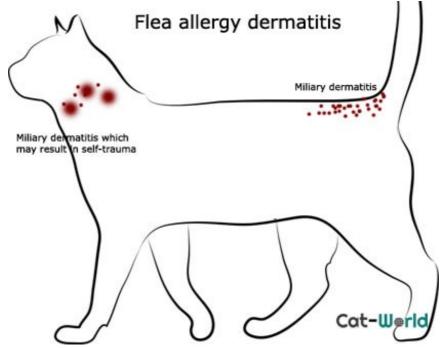
- Allergic
- Parasites
- Skin disorders
- Other

# Flea bite hypersensitivity

The most common causes of scabs on your cat is <u>flea</u> <u>bite hypersensitivity</u>. Cat fleas are wingless parasites, the adult flea lives on the cat's skin, feeding off his blood. Many cats develop an allergy to the saliva in flea bites, causing a localised reaction.

#### Symptoms:





Small, raised crusty bumps (<u>miliary dermatitis</u>) on the back of the cat (just in front of his tail) and around the neck and chin. It is hard for the cat to scratch the scabs on his back, so they remain small and crusted. The neck and ears are easier for the cat to reach and as the cat scratches the skin becomes further damaged, resulting in bleeding and large scabs. Scabs can range in size from 3mm to 1-2cm or more in severe cases.

### Treatment:

Diligent flea control. Not only must you keep your pet flea free, but the environment must also be treated as 90% of the flea's lifecycle is spent off the cat and in the environment. <u>Antihistamines</u> can help to control the itchiness.

I have battled FAD in one of my cats for quite some time. Recently I switched them over to Comfortis (Spinosad), a once a month tablet and his condition cleared up completely.

## Food allergy

Cats can develop allergies to a number of things including food. It is possible for a cat to develop an allergy to a type of food after having eaten it for years.

### Symptoms:

Food allergies typically affect the head, ears and neck area, causing non-seasonal itching, which may progress to small papules and large areas of open and weeping scabs. Other symptoms may include hair loss, vomiting, and excessive licking of the affected area.

#### Treatment:

If a food allergy is suspected, your cat will be put on a *novel* diet (ie; a type of food he's not had before such as duck or kangaroo) to see if the symptoms clear up. He will then be *challenged* by going back to his usual diet if the symptoms return, food allergy is the cause. Treatment involves switching your cat to a different hypoallergenic diet.

## Contact dermatitis

Contact dermatitis occurs when your cat comes into contact with an irritant such as soaps, shampoos, plants, medications etc.

### Symptoms:

Common symptoms of contact dermatitis include nonseasonal itching, which can cause damage to the skin and formation of small scabs on the skin. Commonly affected areas include areas without much fur such as the ears, underbelly, paws etc.

#### Treatment:

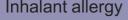
Identification and elimination of the substance causing contact dermatitis is the best solution.

For mild cases, over the counter antihistamines can help to control itching. Common brands include Phenergan, Periactin, Polaramine, Zadine, Claratyne and Zyrtec.

Corticosteroids for cats whose contact dermatitis has become unmanageable. These medications reduce inflammation, itching, and swelling, which allow your cat's skin gets a to recover.

Antibiotics may be necessary to treat secondary bacterial infections.

If the condition flares up again, further investigation will be necessary to determine what is causing the allergy. At which time a patch test will be necessary.



Inhalant allergy (*atopy*) is an allergic reaction caused by breathing in airborne particles such as pollens, dust mites, <u>storage mites in dry food</u> and moulds. Humans typically react to inhaled allergies by sneezing and wheezing, however, cats are more likely to develop skin problems. Inhalant allergy is the third most common type of allergy to affect cats.

### Symptoms:

Non-seasonal itching, which can cause damage to the skin and formation of small scabs on the skin. Commonly affected areas include areas without much fur such as the ears, underbelly and the face. *Treatment:* 

Remove the irritant if possible, switch to a canned or home made diet (storage mite allergy) and antihistamines and/or steroids to help control the itch.



## Mange



Image courtesy Monica R., Flickr Mange (feline scabies) is a highly contagious condition caused by a tiny spider-like parasite which burrows into the cat's skin.

## Symptoms:

Intense itching and scabs, especially along the ear margin which may become thickened. The head and neck are the most commonly affected areas, although left untreated, the mite can move to other parts of the body.

#### Treatment:

If one cat in your household has been diagnosed with this condition then all cats should be treated, even if they show no signs of infection.

There are several possible treatments available for notoedric mange:

- Semi and longhaired cats may need to be clipped. Cleansing of the area to soften thick crusts, followed by a weekly lime sulfur dip at 2.5%.
- Amitraz has been shown to be another successful dip, this product hasn't been approved for use on cats, though.
- <u>Ivermectin</u> is given by injection once a week for 4-6 weeks. This treatment hasn't been approved for use in cats, although reports are that it is safe. According to the Merck website, it has been known to cause death in kittens.
- Revolution: This product is typically a flea and worm product but has shown to be effective on notoedric mange.

All bedding and grooming tools should be thoroughly washed at the same time of treatment.

## Demodicosis

Demodicosis is an inflammatory skin disease in cats caused by the Demodex mite. There are two species, *Demodex cati* and *Demodex gatoi* which infect cats.

- Demodex cati is long and slim, living within the hair follicles.
- Demodex gatoi is shorter, living within the surface layers of your cat's skin.

Demodicosis a common infection in dogs, but rare in cats and when it does occur, it usually in cats who are immunocompromised or malnourished. Diseases such as diabetes, <a href="https://hyperadrenocorticism">hyperadrenocorticism</a> (Cushing's syndrome), feline leukemia virus, feline immunodeficiency virus and use of immunosuppressive drugs can all predispose your cat to develop demodicosis.

Transmission occurs through direct cat to cat contact. Most cats remain asymptomatic, however, those who have a weak immune system can go on to develop clinical signs of demodicosis.

### Symptoms:

Itching, overgrooming, single or multiple areas of thinning hair along with crusting fluid-filled sores. The head, neck, and ears are most commonly affected.

### Treatment:

Find and treat the underlying cause where possible as well as medications to kill the mite. Spontaneous remission may occur in untreated cats, especially those with localised demodicosis.

- Lime sulfur dips or shampoos for four to six weeks. Continue dips until skin scraping tests return negative.
- Amitraz is an insecticide which can kill the mites. This is toxic to cats, therefore use great care and closely monitor your cat.

Other treatments may include the following:

- Daily or weekly oral <u>ivermectin</u> for four weeks. It is important to monitor the cat during treatment.
- Wash bedding and blankets in very hot water, hang in the sun to dry.
- Treat all cats in the household.

## Ear Mites

Ear mites are a common spider-like external parasite which causes significant discomfort to the cat. Although the name would suggest otherwise, ear mites can live on any part of the body although they generally live in the ear canal of



cats. They are the most common cause of *otitis externa* (inflammation of the outer ear canal) in cats. *Symptoms:* 

Intense itching, waxy buildup, coffee like grounds in the ears, and eventually damage due to trauma from scratching and a secondary bacterial infection may develop. It affects kittens and outdoor cats most often, however, cats of any age can become infected.

#### Treatment:

Treatment depends on the severity of the infection.

- Removal of the exudates from the ear by instilling a few drops of mineral oil and gently massaging the base of the ear. This will loosen the exudate, which will make it easy to remove.
- Your veterinarian will be able to prescribe a commercial insecticide to kill the mites. Products
  vary from country to country, but below is a list of popular products which may be prescribed.
  These treatments must be carried out over several weeks, it is not possible to kill the eggs or
  pupae. The aim of treatment is to kill adults as they reach maturity and break the life cycle of the
  mite.
- Treat all household cats and dogs at the same time.

## Ringworm



Ringworm a common fungal infection which affects the skin, fur, and nails of cats. It is caused by a microscopic group of parasitic fungal organisms known as *dermatophytes*. Ringworm invades the dead, outer layers of the skin, claws, and hair. The name *ringworm* comes from the ring like, circular <u>lesions</u> which develop on the cat's skin. The fungus is more common in areas of high humidity and temperatures.

Kittens and senior cats, cats in crowded environments such as catteries and shelters are at greater risk. Persian and Himalayan cats appear to be more predisposed to the disease than other breeds which may suggest a genetic component.

## Symptoms:

The appearance of bald patches of circular lesions. Lesions may become itchy, which leads to the formation of scabs. Ringworm lesions are typically larger than most other causes of scabs in this article.

#### Treatment:

Once a diagnosis has been made, it will be necessary to treat both your cat and the home. If you live in a multiple cat household, all cats in your home will need to be treated. It is easier if you can keep all cats confined to just one room while treatment is underway to avoid spreading spores around the home. Your veterinarian will prescribe a shampoo or dip to treat ringworm. Treat all cats in the household.

Ringworm is easily spread from cats to people and vice versa, so take care when treating an infected cat. If you do become infected, over the counter creams are available at your chemist.

## Feline acne



Image © Dianne, Flickr

Feline acne is a condition in which blackheads and inflammation develop on the chin. There are many causes including the use of plastic food bowls, allergies, inflammation and poor grooming.

## Symptoms:

The appearance of blackheads on the chin, which often have the appearance of dirt. Blackheads can become inflamed and form crusts, scabs, and swelling.

#### Treatment:

- Keep the area clean with an antibiotic soap, Betadine or in more severe cases ointments or gels which contain benzoyl peroxide such as OxyDex.
- Oral antibiotics to treat secondary infections.
- Switch from plastic to glass or metal bowls.
- Topical steroids to control the itching.
- Strict hygiene, wash food and water bowls in hot, soapy water after every use.

# Eosinophilic granuloma



A condition characterised by the presence of skin lesions on various parts of your cat's body. The exact cause isn't known but it is believed it may be the result of certain allergens such as flea bites, food or inhalant allergens. Some cats may only have one outbreak, while in others the condition can come and go.

## Symptoms:

There are three types of lesions:

- 1. Indolent ulcer (also known as rodent ulcer) most often occur on the upper lip with a raised, thickened area which is well defined and glistening,
- 2. Eosinophilic plaque can occur on any part of the body and appear as a raised, hairless lesion which may be ulcerated
- 3. Eosinophilic granuloma which appears as yellow/pinkish lesions usually along the back legs. Male cats are most often affected with eosinophilic granulomas.

## Treatment:

- Removing exposure to allergens if possible, including diligent flea control and food elimination trials.
- Zyrtec, an antihistamine has been shown to relieve symptoms.
- If there is no remission then steroids may be prescribed. Steroids to reduce inflammation and in severe cases interferon, an immunosuppressive drug.
- If lesions are unresponsive, surgical removal may be necessary.

## Pemphigus complex



Pemphigus complex is a group of rare bullous autoimmune diseases in cats, which are the result of an overactive immune response against the cat's own tissues. An overproduction of *autoantibodies* which attacks the epidermal bonding molecules causing them to separate, resulting in the formation of superficial vesicles and bullae (a blister which contains serous fluid) which rupture to form crusted erosions on the skin. There are three types of pemphigus which affect different layers of the skin.

- 1. P. foliaceous which affects the top layer of skin.
- 2. P. erythematosus, the second most common form which affects the head and feet.
- 3. P. vulgaris the rarest form in which lesions grow on the mouth, claw folds, armpits, and groin.

## Symptoms:

Symptoms vary depending on the type but may include distribution of pustules around the mouth, face, neck, feet, and groin with crusts and hair loss.

#### Treatment:

- Immunosuppressive drugs such as oral prednisolone, or in milder cases topical steroids.
- If immunosuppressive drugs fail to produce a remission, Chlorambucil, a chemotherapy drug, can be given.
- Antibiotics to treat a secondary infection.

## **Abscess**



#### Image War Head, Flickr

An abscess is a pocket of pus under the skin which occurs when bacteria, which reside on the skin or teeth, enter the body via a puncture wound, most often by a bite during a cat fight.

An inflammatory response occurs, drawing huge amounts of white blood cells to the area and increasing regional blood flow. Pus forms, which is an accumulation of fluid, toxins, living and dead white blood cells, dead tissue and bacteria. A thin membrane (pyogenic membrane) surrounds the abscess. This area begins to grow, creating tension under the skin and further inflammation of the surrounding tissues. As the abscess grows, the skin thins and weakens, eventually causing the abscess to rupture and the pus drains out.

#### Symptoms:

If the abscess hasn't drained, there will be a hot extremely painful lump under the skin your cat may also have a fever, and go off his food. If it bursts and drains, there will be a foul odour, as well as discharge. Once this has occurred the wound will form a scab.

## Treatment:

The goal of treatment is to lance, clean, and debride the area to promote healing.

#### **Undrained abscess:**

The fur around the abscess is clipped and cleaned, the abscess is lanced and the pus drained, any dead tissue will be removed (debrided), and the area is flushed with sterile saline until the liquid runs clear. This procedure will be under heavy sedation or general anaesthetic. The cat may need to stay in hospital for a day or two while he recovers.

#### **Drained abscess:**

Treatment is much the same as above, minus lancing. The area is clipped and cleaned, the wound is flushed with sterile saline any dead tissue is removed.

If the abscess is large, your veterinarian will insert a surgical drain to assist with the removal of pus. Flush daily with antiseptic or sterile saline as advised.

A long-acting antibiotic injection or oral antibiotics will be given.

## Stress (overgrooming)

Cats display signs of stress in many ways and there are many causes of stress in cats including changes in the home environment, new pet, family member, moving house.

#### Symptoms:

Stress manifests in many ways, some cats will <a href="hide">hide</a>, or <a href="go off their food</a>, other cats will engage in excessive grooming (<a href="https://overgrooming">overgrooming</a>). This can lead to damage to the skin and the formation of crusty scabs on the coat. Common triggers include a change in routine, new family member (animal or human), moving house, sickness.

#### Treatment:

Stress is managed in a number of ways, including removing the cause of stress if possible, giving your cat a regular and set routine. <u>Play therapy</u> and anti-anxiety medications.

## Adverse reaction to topical flea products

There are a number of popular topical (spot-on) products to treat cat fleas. While they are extremely convenient, some cats can develop a skin reaction.

#### Symptoms:

Loss of hair, redness, rash, ulceration or in severe cases loss of skin.

#### Treatment:

This may vary depending on the severity of the reaction but may include antibiotics to prevent secondary infection and painkillers.

If your cat has had an adverse reaction to a topical flea product, there are a number of alternatives such as tablets and chews.

## Bacterial infections (pyoderma)

<u>Pyoderma</u> is an infection of the skin which can develop due to trauma, such as itching and scratching which damages the area.

## Symptoms:

Irritation and inflammation of the skin result in crusty pustules. Immunocompromised cats are more at risk for pyoderma as it is an opportunistic infection.

### Treatment:

Oral antibiotics, as well as topical antibiotics, applied to the affected area to clear up the infection and addressing the underlying cause (if known).

## Insect bite or sting

Insect bites and stings can cause a localised reaction which leads to intense itching.

### Symptoms:

Scratching which can damage the skin resulting in a wound which heals and scabs over. If you notice one or two small scabs on your cat, it is likely to be caused by a bite or a sting.

#### Treatment:

Benadryl (antihistamine) can control itching and discomfort in cats who have severe reactions. Dosage is 1 milligram (mg) per pound, or 2 mg per kilo, twice a day.

## Sunburn

Cats are prone to developing sunburn on areas of their body with thin or no fur such as the ear tips and nose. Light coloured cats are particularly at risk due to their lack of pigment.

#### Symptoms:

Reddened skin and hair loss of the affected area, more severe cases may develop itching and thickening of the skin. Over time, this may become damaged and form sores which dry into scabs.

#### Treatment:

- Topical or oral steroids to treat severe sunburn.
- Antibiotics may be necessary to treat secondary bacterial infections.

Keep cats indoors during the hours of 10 am - 2 pm to avoid sunburn. Anybody who has experienced sunburn knows how painful it is, and just like humans, cats can develop cancer from exposure to the sun (see below).

## Skin cancer

A number of cancers can affect the skin which include <u>melanoma</u>, <u>basal cell carcinoma</u>, squamous cell carcinoma and <u>mast cell tumour</u>. Areas with little or no skin are most at risk, which includes the ear tips and the nose. Cats with light coats are at greater risk due to the lack of melanin in the skin. **Symptoms:** 

- Firm lump underneath the skin which may be hairless or pigmented (melanoma)
- · Red and crusted sores which don't heal
- Bleeding ulcers which won't heal

#### Treatment:

Surgery to remove the affected area with a wide margin. Chemotherapy or radiation therapy may be necessary as a follow up or in for tumours that can not be surgically removed.

# Diagnosis

Your veterinarian will perform a physical examination paying close attention to the type and location of the scabs. He will obtain a medical history from you, which may include the following:

- How long have the scabs been present?
- Do they come and go?
- Do they occur at a particular time of the year (spring, summer etc)?
- Have you noticed any other symptoms?
- Is your cat taking any medication?
- Any changes to the home environment?
- Does your cat have any other concurrent diseases?
- All of these can help your veterinarian to determine a possible cause.

## Tests:

There are a number of <u>diagnostic tools</u> available to determine the cause of scabs on cats, these include:

A black light – To check for ringworm, which may glow if your cat has the fungus.

**Skin scraping test** – To look for skin parasites such as mites or fungi. An area of skin is shaved (if necessary, often the fur is missing). Two drops of mineral oil are then put on the skin and a blade is used to scrape the superficial layers, which are then examined under a microscope. The test is mildly uncomfortable, similar to a graze, but not unduly painful.

**Skin cytology test** – To check for inflammation, parasites, fungi, bacteria. This is similar to a skin scraping test although. A sample of the lesion is taken using a cotton bud, for microscopic evaluation.

**Skin biopsy** –A sample of skin tissue is removed, prepared and evaluated under a microscope.

**Food trials** – This test is to determine if a cat has a food allergy and involves feeding a novel diet containing ingredients your cat has not previously consumed to see if symptoms improve.

**Skin prick test** – To check for allergies. A patch of fur is shaved and several needles containing a few common allergens (such as dust mites) is injected into the skin. If there is a reaction at the site of one or more skin pricks, this will show your veterinarian your cat is allergic.

**Trichogram** – The microscopic examination of the hairs and may help to identify fungal infection such as ringworm or Demodex mites.

**Fungal culture** – The veterinarian gently scrapes the surface of the skin with an unused toothbrush, or plucks out some hairs from the affected area to obtain a sample. The sample is placed onto a culture medium which is stored in a dark and warm location in order to encourage fungal growth. It can take several weeks to obtain results.

**Fine needle aspiration** – A fine needle is used to obtain a small sample of mass or cyst to obtain a small sample of cellular material for microscopic evaluation (cytology).

**Biopsy** – A biopsy involves the surgical removal of a small sample of skin (or other tissue) which is evaluated under a microscope. There are two main types of skin biopsy, punch and scalpel.

- A punch biopsy uses a circular punch tool to remove a small section of skin.
- The scalpel is used to remove larger skin samples, such as lumps on or under the skin.

## Footnote

Omega-3 fatty acids are essential fats meaning cats are unable to synthesise them themselves and need to obtain them via their diet. There are a number of health benefits including reducing inflammation.

Soothing shampoos containing oatmeal can help to relieve itchy skin conditions.

<u>Antihistamines</u> can help to relieve itching associated with allergies. They are not a cure but can help in the short term.