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Your dog's skin is not a sterile environment. In all fairness, that's not because he's a dog. Your skin is not sterile either. There are always infectious agents like bacteria, fungus and yeast in residence on skin surfaces. They just don't always cause a problem. Most of the time organisms live on the skin without issue because the protective mechanisms that exist in skin keep them from causing actual infection. That is until something happens that compromises the system either by weakening the skin's defenses or by strengthening the infectious agents' offense. This can lead to skin fold dermatitis.

#### What can cause skin fold dermatitis?

One of the conditions that can definitely swing that battle in favor of the infection is the presence of skin folds. Whether by intention (as in smoosh-faced or wrinkled breeds of dogs like Pugs, Boston Terriers, Bulldogs or Shar-peis) or by mistake (due to obesity or acts of nature), any time skin forms folds, ridges, mounds and valleys, there is an increased potential for inflammation and infection to occur. Inside the folds there is more warmth and more moisture. This is especially true in areas with a nearby, natural source of moisture like lip folds that are constantly bathed with saliva or facial folds that collect tears, or even the area around a female dogs vulva. But any fold or crevice in the skin is going to be moister than a flatter area that benefits from more abundant air circulation. In addition, when you fold the skin, the hairs on one side of the skin rub constantly on the opposite side and vice versa. This friction further traumatizes the skin and causes even more inflammation and moisture. When the normally dry, desert-like environment of the skin becomes more humid that predisposes it to the over-growth of the resident and transient bacteria or yeast.

# How do you know if a dog has skin fold dermatitis?

You might think that it would always be readily apparent if your dog had infection in his skin folds. But you would be surprised at how many people bring their

dogs in with a complaint of an unpleasant odor that they can't identify. Sometimes the inflammation in the skin folds is not that obvious, but a cotton swab wiped through the fold reveals the source of the odor. Other times, of course, it is very clear that the dog is in discomfort. Visible redness, discharge, licking, chewing, or scratching will indicate a problem.

Identifying the existence of skin fold dermatitis is not the end of the diagnostic process, however. Your veterinarian will still want to determine the type of infection. This might involve skin scrapings to check for mites, fungal cultures and cytology. Looking at a sample of the discharge under the microscope is important to determine whether a concurrent Malassezia yeast infection is present since in general canine skin infections involve a combination of Staphylococcus bacteria and Malassezia in about 50% of cases<sup>1</sup>.

## How do you treat/manage skin fold dermatitis?

The use of appropriate antibiotics and/or anti-yeast agents topically and systemically is essential. Cleaning and drying the folds is also key. Your veterinarian will be able to recommend products and protocols best suited to your dog's individual circumstance. If a few extra pounds is contributing to the problem then weight management may help. In severe cases, <a href="surgical">surgical</a> removal of the folds can be curative. But if your dog's skin folds are genetic, it is likely that you will find yourself frequently managing some degree of dermatitis.

If you have any questions or concerns, you should always visit or call your veterinarian -- they are your best resource to ensure the health and well-being of your pets.

#### **Resources:**

1. "Overview of Pyoderma." *Merck Veterinary Manual*. June 2013. Web.





