



## **Pemphigus Foliaceus**

### **Also called:**

- PF
- pemphigus

### **What is pemphigus foliaceus?**

Pemphigus foliaceus (PF) is a skin disease of dogs and cats that typically begins in early middle age. It causes pustules and crusting on the skin surface. The skin under these crusts is raw and may be painful. The disease may begin on the face and ears, but often spreads to affect the skin on other parts of the body. It can also cause thickening and cracking of the footpads. Fortunately, other organs are not affected by the disease. In cats, the claw fold is a commonly affected site.

### **What causes pemphigus foliaceus?**

The skin lesions in PF arise when the animal's immune system targets the skin. The immune system normally clears infections and any substances that are "foreign" to the body, while ignoring, or tolerating, substances that are normally found there. In PF, the immune system appears to consider some of the normal components of the skin as foreign. It uses the mechanisms normally launched at foreign invaders to try to "clear" these skin components. The resulting inflammation and skin damage lead to the crusting that is seen on the surface.

What causes the immune system to no longer consider the skin as a normal part of the body? Unfortunately, we do not know what factors contribute to this error. In a few cases, medications or infections trigger the immune system to act inappropriately. We know that some breeds of dogs seem more prone to developing the disease. Once PF has developed, it tends to be a lifelong condition due to the long-lasting "memory" of the immune system.

### **How is pemphigus foliaceus diagnosed?**

Pemphigus foliaceus is diagnosed by skin biopsies. These may be collected under local anesthesia, but often, sedation or general anesthesia is required.

### **How is pemphigus foliaceus treated?**

The disease is treated with oral or injectable medications that suppress the overactive immune system. We use one or more oral drugs to treat PF in each patient. Prednisone is the most common oral medication prescribed, as it gives the most rapid and effective results. We initially use a high dose of medications to induce a “remission” of the PF, and then slowly taper the dose of the drugs until the minimal effective dose is being administered.

In addition to prednisone, other medications may be given to suppress the immune system. These drugs tend to have a slower onset of activity, but they can help to reduce the dose of prednisone that is needed in the long run. Prednisone has the most obvious side effects, including excessive thirst and urination, excessive appetite and weight gain, and panting. Because they suppress the immune system, all of the medications used for PF can lead to recurrent infections. All patients treated with these drugs require careful monitoring to minimize their side effects. We will recommend checking your pet’s blood values frequently at the outset of therapy. As the disease goes into remission and the dose of medications is reduced, the monitoring can be less frequent.

*Pemphigus foliaceus* is usually treated for life. The aim of therapy is to use the lowest possible dose of medications while still controlling the disease. A small amount of crusting is acceptable if a very high dose of drugs is needed to eliminate it altogether.

The disease tends to wax and wane even without therapy, which also makes monitoring essential. It may be exacerbated by sunlight in some pets, so we recommend keeping your pet inside during peak sunlight hours. A sunscreen (not containing zinc oxide) can be used to protect the affected areas on the face.