



MEET FIONA

FIONA IS A 10 YEAR OLD FEMALE SPAYED TERRIER

BY **MELANIE HNOT**, DVM, DACVD (Dermatology)



Fiona was presented to the Emergency Service for worsening pruritus and crusting dermatitis despite being treated with a Dexamethasone-SP injection and Clavamox for 10 days. She was referred to the Dermatology Service. Pemphigus foliaceus is an autoimmune disease, whereby the immune system attacks the desmosomes leading to separation of the keratinocytes and acantholysis. It can be triggered or induced by medications, but it can also be idiopathic. Clinical signs include pustules, crusting, and alopecia. Patients can present with bilaterally symmetric lesions on the head including periocular region, pinnae and muzzle. The trunk can also be affected. Hyperkeratosis of the paw pads and crusting of the nail folds may be observed.

When evaluating a patient with pustules and crusting, it is recommended to perform cytology, deep skin scrapings and a dermatophyte culture. Cytology of an intact pustule can reveal neutrophils and acantholytic cells. While suggestive of pemphigus foliaceus, acantholytic cells are not pathognomonic as acantholytic cells can also be observed with bacterial infections and dermatophytosis. Bacteria may be observed due to a secondary superficial pyoderma and a bacterial culture would be recommended. Deep skin scrapings will rule out demodicosis. Definitive diagnosis can be made with biopsies for histopathology. Pustules are the ideal lesion to biopsy. Special stains may also be used to look for evidence of dermatophytosis.

Treatment is aimed at immunosuppression. Glucocorticoids are commonly used. Azathioprine can be used as a steroid-sparing agent. There are varying reports of cyclosporine's use in treating pemphigus foliaceus in dogs. Recent reports suggest that mycophenolate may also be helpful. Doxycycline and niacinamide are another option. Fiona was initially treated with prednisone. Due to side effects associated with prednisone, a steroid-sparing agent was added. While azathioprine is a common steroid-sparing agent, mycophenolate was chosen for Fiona due to elevated liver enzymes.

Patients on immunosuppressive therapy should have bloodwork prior to starting medications as well as for monitoring. The frequency of bloodwork depends on the medications that are used. I recommend recheck exams every 2 weeks initially so that medications can be slowly tapered based on patient response. The goal is to find the lowest dose of medication that can still control the disease. As medications are tapered, recheck exams are necessary to check for flare-ups in the disease. Most patients require lifelong medications, however, for some patients we may be able to discontinue medications at some point.

A thorough drug history is useful if drug-associated pemphigus foliaceus is suspected and those medications should be discontinued. It's also important to remember that ultraviolet light can worsen pemphigus foliaceus, which may affect how our patients are doing in our sunny climate.

Fiona was slowly tapered off of prednisone. She is now doing well on just mycophenolate.

If you have questions about this case or any others, please free to contact Melanie Hnot at Melanie.Hnot@vca.com or via our dedicated referral line at 954-616-9835.

Dr. Hnot is available to see dermatology referrals during the week and some Saturdays.

