



Histopath Consulting - Peter H Rowland, DVM, ACVP—offering a private, personalized biopsy

Eosinophilic Furunculosis of the Face

This 2 year old lab had an acute onset of papules and ulcerations on the muzzle and around the eyes. The biopsies had prominent inflammation centered on follicles that have eosinophils with fewer mononuclear cells. There are ruptured follicles with severe associated inflammation, ulceration, edema and serocellular crusts. Dense aggregates of eosinophils are around free hair shafts as well as in follicles and in the interstitium. No bacteria or fungi were seen in the inflamed follicles.

The acute onset is typical of facial eosinophilic furunculosis as described in dogs. In some reported cases, exposure to an insect sting or spider bite has been documented and the lesion is felt to be a hypersensitivity response to this initiating incident. Lesions are usually on the nose and muzzle and lesions may also be seen periocularly. They are usually self limiting over a two to three week period, but glucocorticoids can speed recovery with a response seen in one to two days.

Clinical differentials would include deep bacterial nasal furunculosis, some facial autoimmune conditions and severe dermatophytosis. The acute onset is a key clinical feature.



References: Curtis CF et al. Canine eosinophilic folliculitis and furunculosis in three cases. *J Sm An Pract* 36:119-123, 1995.

Feline Progressive Histiocytosis

A recent submission from a 13 year old DSH cat was accompanied by a few photos. In the photo to the right you can see a raised plaque involving the lower lip. These scaling plaques were also seen on the dorsum and thorax as well as the face. There was progression from an initial lesion to multiple sites over a course of several months.

Biopsies of the lesions revealed dense, dermal infiltrates of round cells that had histiocytoid morphology. In some areas pleomorphism was mild and there were intermixed inflammatory cells, but other areas had more prominent nuclear size variation with scattered, larger, atypical cells. This morphology is consistent with feline progressive histiocytosis.

These cats may initially present with a single lesion, but multiple lesions develop over time. Typically there (cont page 2)

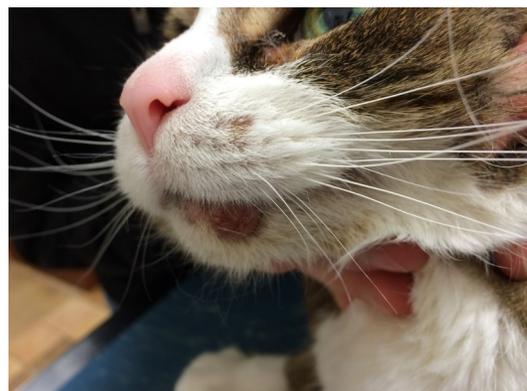


Photo courtesy Dr. Dralle—thanks!

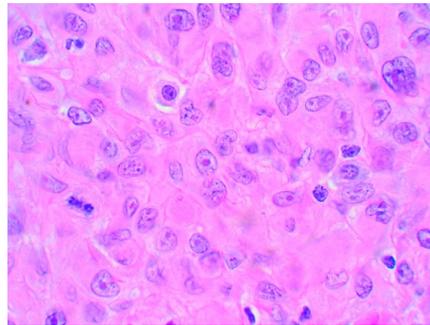
Histiocytosis (cont)

is a prolonged, indolent course of disease, but lesions may eventually progress to involve internal organs. Later biopsies also tend to have more prominent pleomorphism of cells and these later lesions along with the more widespread systemic involvement have features of disseminated histiocytic sarcoma. In the past, disseminated histiocytic sarcoma was referred to as malignant histiocytosis, but this term has fallen out of favor.

Immunophenotyping reveals the cells are consistent with origin from interstitial dendritic cells which are antigen presenting cells that can be found in a variety of tissues. A variety of histiocytic disorders have been identified, some arising from interstitial dendritic cells, some from Langerhans cells and others from bone marrow derived macrophages.

In cats, another form of histiocytic disorder has been seen in the lungs—feline pulmonary Langerhans cell histiocytosis and, in those cases, immunophenotyping indicates a Langerhans cell origin.

Although the skin disease can have a long clinical course, it generally eventually progresses to



This photo shows the dense infiltrate of round cells in the dermis. Note the larger, atypical cells with larger nuclei and one mitotic figure. With time there tends to be increased pleomorphism and there may eventually be systemic involvement as with histiocytic sarcoma.

more widespread or disseminated disease.

References: Gelberg HB. Diagnostic exercise: Multiple skin nodules in a cat. *Vet Pathol* 50: 569-571, 2013.

V.K. Affolter I; P.F. Moore. Feline progressive histiocytosis. *Vet Dermatol.* June 2006;17(3):207.

Affolter VK et al. Feline progressive histiocytosis. *Vet Pathol* 43:646-655, 2006.

Have you seen this?



Photo Dr. Baldwin—thanks!

Here you see the skin of an 11 year old Basset hound that has multiple, well delineated, patchy areas of alopecia. Any thoughts?

See the info to the right...

As you can see, there is loss of hair without erythema, ulceration or crusting. The histologic changes in this case included a mixed lymphocytic inflammatory response that was centered on the deeper hair bulbs of the follicles. This pattern is typical of alopecia areata.

Given the photo alone, you would also have to consider other causes of non-inflammatory alopecia such as; dermatophytosis, localized demodicosis, pattern baldness, follicular dysplasia or pseudopelade.

Alopecia areata is suspected to be immune-mediated and is a cosmetic problem that can be relatively mild and that may improve spontaneously. In some dogs the hair loss is permanent while others have responded to immunosuppressive medication. The face or temporal areas are often involved.



Laboratory News -
The pandemic economy has made it impossible to find the labor to reliably package biopsies and shipping supplies and I will no longer be able to offer these packages of supplies. Sorry for the inconvenience. Pre-filled formalin containers and protective plastic jars are readily available and I have added some links on my website at—histopathconsulting.com.

Peter Rowland,
DVM, ACVP –
phrowland6@gmail.com
518 373 8820
7 Lenora St,
Worcester, MA
01607

Ask the Pathologist !

Please send your questions via email—phrowland6@gmail.com

Those of general interest may appear in future issues of Practical Pathology.