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Date received: 08-Mar-07

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Case # YB 182121-3978-2007

Owner Name: Martin
Patient Name: Diva #1602 (Hoofprint Red Lake Cruiser)
Breed: German Shepherd
Sex: FS
Age: 10y (born Jan 23, 1997)
Tissue: multiple

There is mild autolysis present, particularly affecting the small intestinal samples.

In the stomach, there is moderate to severe inflammation throughout the mucosa, and there is prominent mucosal lymphofollicular hyperplasia. The inflammation consists of eosinophils, lymphocytes and plasma cells, and rare neutrophils can also be seen. The gastric glands are tightly packed and the gland mass is adequate. In the small intestine, the tips of the villi are autolysed and cannot be assessed. In the deeper mucosa, the crypts are tightly packed and the cellularity of the lamina propria is normal. We do not see submucosal infiltrates. The colon is normal. The glands are tightly packed, the surface epithelium is intact and mature and the cellularity of the lamina propria is normal.

In the kidney, there is mild thickening of the glomerular mesangium, but this is an expected finding in a dog of this age. We do not see proteinaceous fluid in the tubules or collecting ducts. The proximal convoluted tubules are tightly packed and there is no evidence of tubular necrosis, or interstitial inflammation or fibrosis.

In the liver, there are scattered lipogranulomas present, but not above what we would expect to see in a dog of this age. There are low numbers of lymphocytes and plasma cells within portal tracts. The liver is otherwise normal.

The spleen has a few nodular areas of intense congestion and subcapsular hemorrhage. There are large numbers of hemosiderin-laden macrophages in these regions, suggesting that the congestion has been present for some time. A few hematopoietic cells can be seen.

The pancreas is normal.

The lesions are similar in each of the multiple sections of skin examined. In all, there is a dense lichenoid band of inflammatory cells at the dermoepidermal junction which, in several areas, obscures the interface. These infiltrates are composed mostly of lymphocytes accompanied by fewer plasma cells. Lymphocytes infiltrate into the lower levels of the epithelium where we find occasional hydropic swelling and apoptosis of basal keratinocytes. This is a depigmenting lesion with large melanomacrophages scattered around superficial blood vessels.

In some areas, there is "squamatization" of the epithelium with loss of the basal layer and thinning of the epithelium. The surface is covered by a thickened layer of keratin with serum accumulating between keratin lamellae. Significant cellular crusting is not evident and there is no indication of an acantholytic process.

In one of the sections from the nose, there is an area of deep ulceration where we do find a few neutrophils within the exudates.

In the biopsy from the vulvar skin, we see, in addition to patchy interface lesions as seen in the nose areas of pyoderma. These consist of areas of epidermal spongiosis, pustule formation and crusting with lesions of Eosinophilic folliculitis and furunculosis. Many of the inflamed hair follicles contain bacteria and some have ruptured. The free hair and keratin and bacteria are surrounded by numerous neutrophils and macrophages.

DIAGNOSIS:

1. LYMPHOPLASMACYTIC AND EOSINOPHILIC GASTRITIS
2. NORMAL SMALL INTESTINE AND COLON
3. NORMAL KIDNEY, LIVER, SPLEEN AND PANCREAS
4. LYMPHOCYTIC INTERFACE NASAL AND PERICULVAR DERMATITIS;
MOST CONSISTENT WITH CHRONIC LUPUS ERYTHEMATOSUS
5. (ONE SECTION OF VULVAR SKIN) AREAS OF MUCOCUTANEOUS
PYODERMA
6. LESIONS OF DEEP PYODERMA IN VULVAR SKIN SECTIONS

Comment:

There is evidence of chronic inflammation in the stomach, consistent with inflammatory bowel disease, but we do not see inflammation in the remainder of the gastrointestinal tract. The classification of this lesion is challenging. Most institutions would probably classify this lesion as lymphoplasmacytic IBD, since the predominant cell type is the plasma cell. However, we would classify this lesion as eosinophilic IBD, since although eosinophils are present in lower number, we believe that their presence is more significant since these cells have a short half life in tissues, and lymphocytes and plasma cells will persist in tissues for longer and thus will accumulate over time.

The sections from the skin of the vulva and the nose (most strikingly in the nose) reveal lesions of discoid lupus erythematosus. In the vulvar skin, there is also evidence of chronic but active deep pyoderma.