



Pet News

Psychotropics Animal Health Division Publication



pil

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From the Editor's Desk.....

Dear Readers,

As Mahatma Gandhi rightly said, "The greatness of a nation and its moral progress can be judged by the way its animals are treated. Animals are innocent creatures, much worthy of love."



We believe that being able to serve animals in any way, be it because of profession or otherwise, is a privilege. Animal Healthcare by PIL feels fortunate to share this privilege with veterinarians. We always endeavor to provide products of highest quality to compliment your much coveted service.

With the summer around, many pet patients will suffer from skin disorders and diseases. However, it is important to diagnose whether the underlying cause is just a skin disorder or something else. In this edition, we talk about the internal diseases that might cause dermatological issues.

We hope that our newsletter content is of help to our valued veterinarians and also benefits dear pets.

Regards

Geetika Rao

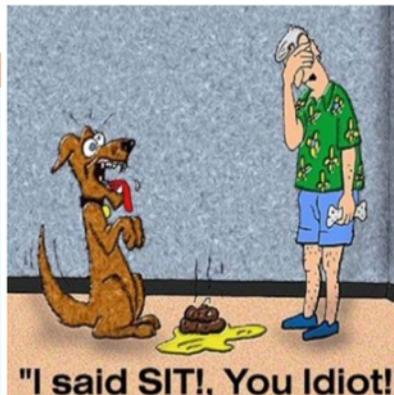
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Recognizing Dermatological Markers of Internal Diseases

Skin is the largest organ of the body and has many functions such as thermoregulation, camouflage, protection etc. But one of its most important purposes is its function as a marker of internal disease. Cutaneous disorders in dogs and cats can be markers of internal disorders such as:

- A hormonal disorder
- A metabolic disorder
- A neoplastic problem
- An inflammatory process
- Other unknown cause

Clinical Importance

Prompt recognition of dermatological markers of internal disease can help early identification of underlying disease. Cutaneous markers also provide for monitoring the recurrence of internal disease. Correct diagnoses of cutaneous disorder are very important, as the cutaneous disorder is more troublesome for the animal than the underlying disease itself.

Pet owners may seek lesions for a long time before bringing their pets to a veterinarian. By taking a thorough history, physical examination and comprehending non-dermatological signs, the underlying disease can be well understood.

Now we talk about some of the dermatological diseases that could be markers of an underlying skin disease.

Target Infection With Perfection

CLX-PET 300
600
Cephalexin 300/600mg Tablets



To get updates on pet issues, follow us at <https://www.facebook.com/pilanimalhealthcare>



I. Superficial Necrolytic Dermatitis (SND)

Also known as hypatocutaneous syndrome or diabetic dermatosis, this disease is common in both dogs and cats. This disease can be associated with liver or pancreatic diseases. SND also resembles glucagonoma syndrome (necrolytic migratory erythema) of humans, which is generally associated with hyperglucagonaemia and a glucagonoma-secreting alpha-cell neoplasm of the pancreas. In rare cases, administration of phenobarbital have also been found to be the underlying pathology. Dogs with SND have extremely low levels of plasma amino acids such as Taurine, Threonine, Alanine, Valine, Arginine, Isoleucine, Proline, Asparagine etc. (such as present in **Pil's Pet Grow**).

Dermatological Markers:

- Crusting Dermatitis (Fig1): Crusting, Erythema, exudation affecting pressure points, mucocutaneous junctions and feet. Alopecia periorally and pericircularly, around the genitals and the distal extremities.
- Footpad Hyperkeratosis (Fig 2 & 3): Foot pads are most commonly affected with extreme thickening, pad margin proliferation, erythema and hyperkeratosis.

Other Clinical Signs:

Early Stages: Only Cutaneous Lesions

Over Several Weeks: Lethargy, inappetance, signs of hepatic or pancreatic disease

Diagnosis & Treatment:

- Histopathology shows red, white and blue color changes upon staining with haematoxylin and eosin
- Skin scraping and coat brushing should be examined to rule out parasitic diseases or demodicosis
- Haematology, biochemistry, urinalysis, bile acid stimulation test and total T4 (plus TSH in dogs) to assess for organ dysfunction and endocrine disease
- Liver Ultrasound commonly reveals honeycomb shaped or swiss cheese shaped liver (having variable sized hypochoic regions surrounded by hypochoic borders, fig 4).
- Increased blood glucose level and normocytic, normochromic on regenerative anaemia
- Differential Diagnosis: Zinc Responsive Dermatitis, CDE, generic dog food dermatosis
- Treatment focuses on liver or pancreatic disease management by providing amino acids (intravenous or oral) and dietary modifications
- High protein diet such as scrambled egg whites, whey proteins, elemental zinc such as in **Pical**, or liver support supplements should be given. Removal of glucogonoma may also be taken up
- Treatment of secondary infection needs to be carried out by the use of topical products such as **Spectrapil Ointment/Lotion** or **Myconorm Pet Powder**



Fig. 1



Fig. 2



Fig. 3



Fig. 4



pil's Squeeze only

PET DENTAGEL

Veterinary Oral Health Council of USA approves use of dental gels for removal of plaque

Apply twice a day on gums

No eating/drinking half an hour before and after application

No Brushing..No Rinsing





II. Hypothyroidism:

Hypothyroidism is a commonly diagnosed canine endocrine disease with golden retrievers, dobermans and neutered dogs and bitches having a higher risk of this disease.

Dermatological Markers:

Thyroid Hormone affects all body tissues, hence majority of cases show dermatological markers. Deficiency of thyroid hormone in particular affects the hair follicles and the follicular growth. Visible dermatological markers include:

- Non pruritic, bilaterally symmetric alopecia mainly affecting lateral trunk and flank (fig 5)
- Rat-tailed appearance with alopecia to the tail/ focal alopecia of the nose (fig 6)
- Rough hair coat/ seborrhea/ hyperpigmentation/ mucinosis and myxoedema leading to tragic facial expression
- Enlarged nipples or mammary glands

- Secondary Microbial Infections

Other Clinical Signs

- Weight Gain, lethargy, mental dullness, behavioral change
- Intolerance of cold, sinus barycardia, testicular atrophy, neurological abnormalities

Diagnosis & Treatment

- Diagnostic tests to be performed are BSS, HBU, Total T4 TSH and free T4 to investigate the working of the liver
- Differential Diagnosis: Other endocrinopathies, follicular dysplasia, cyclical flank alopecia, bacterial pyoderma/dermodicosis
- Oral administration of Thyroid Hormone will relieve pet of behavioral changes and dermatological markers
- Treatment of secondary dermatological markers may be taken up

TSH	FREE T4	FREE OR TOTAL T3	PROBABLE INTERPRETATION
High	Normal	Normal	Mild (subclinical) hypothyroidism
High	High or Normal	Low or Normal	Hypothyroidism
Low	Low	Normal	Mild (subclinical) hypothyroidism
Low	Normal	High or Normal	Hypothyroidism
Low	Low or Normal	Low or Normal	Non-Thyroidal Illness; rare pituitary (secondary) hypothyroidism
Normal	High	High	Thyroid hormone resistance syndrome (a mutation in the thyroid hormone receptor decreases thyroid hormone function)



Fig. 5



Fig. 6

? DID YOU KNOW

- The Beatles song "A day in the Life" has an extra high-pitched whistle, audible only to dogs. It was recorded by Paul McCartney for the enjoyment of his Shetland sheepdog
- In ancient China, an emperor's last line of defense was a small Pekingese dog literally hidden up his sleeve
- Spiked dog collars were invented in ancient Greece and were originally designed to protect dog throats from wolf attacks
- Dogs are direct descendants of wolves. Wolves and dogs can mate to produce fertile offspring

Rx Petmectin

Ivermectin 10mg Mouth Dissolving Tablets



Effective against all stages of parasites



Rx Womnil-Plus⁺

Praziquantel 50mg + Pyrantel Pamoate 144mg
Febantel 150mg Tablets

