

CLINICAL KNOWLEDGE INSIGHTS

CONGENITAL & HEREDITARY DERMATOSES

SEBACEOUS ADENITIS

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AT A GLANCE

- An inflammatory disease that causes the destruction of sebaceous glands
- Leads to scaling and progressive loss of hair
- Uncommon in dogs; also very rare reports in cats and rabbits
- Highest incidence is in young to middle aged animals
- Breed predilections include the Standard Poodle, Hungarian vizsla, Akita, German shepherd dog, Samoyed, Belgian sheepdog and Havanese
- Primarily a cosmetic disease

WHAT DOES IT LOOK LIKE?

- Often affects dorsal back and neck in addition to head, face, ears and tail
- Lesions vary from localized to generalized over the body

SHORT-COATED DOGS

- Lesions often begin as annular areas of scaling and alopecia that enlarge and may coalesce
- Scales are often fine and non-adherent
- Patchy alopecia is common- moth-eaten appearance
- May present with nodular lesions and plaques

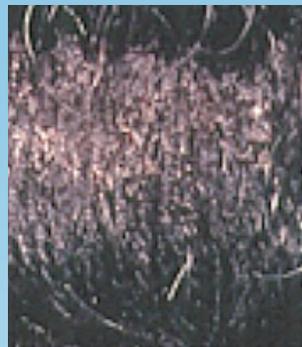
LONG-COATED DOGS

- Hair may become lighter or darker or may change from curly to wavy or straight (poodles)
- Dull, brittle haircoat

PATHOLOGIC IMAGE LIBRARY : SEBACEOUS ADENITIS



Black Standard Poodle with sebaceous adenitis and patchy alopecia on the dorsum



Closer view of back of black Standard Poodle with sebaceous adenitis



Follicular casts surrounding hairs plucked from the black Standard Poodle



Multifocal alopecia in a Vizsla with sebaceous adenitis



Closer view of the head of Vizsla with sebaceous adenitis showing "serpentine" pattern of hair loss.

- Diffuse alopecia is common
- Undercoat is often lost while primary hairs are spared
- Scales often adhere to the hairs forming follicular casts

OTHER CLINICAL SIGNS MAY INCLUDE:

- Hyperpigmentation
- Lichenification
- Secondary superficial or deep pyoderma and associated pruritus
- Otitis externa
- Greasy skin and haircoat +/- malodor

WHAT ELSE LOOKS LIKE THIS?

- Superficial pyoderma
- Demodicosis
- Dermatophytosis
- Follicular dysplasias
- Endocrinopathies- hypothyroidism, hypercortisolism
- Primary seborrhea
- Vitamin A-responsive dermatosis
- Ichthyosis

HOW DO I DIAGNOSE IT?

- History and clinical signs
- Skin scrapings to rule out demodicosis
- Fungal culture to rule out dermatophytosis
- Skin cytology/bacterial culture and susceptibility if indicated

BIOPSY FOR DERMATOHISTOPATHOLOGY

EARLY LESIONS

- Discrete granulomas in areas of sebaceous glands
- No involvement of other adnexa

CHRONIC LESIONS

- Fibrosis replaces absent sebaceous glands
- Hyperkeratosis and follicular plugging may be seen

HOW DO I MANAGE IT?

MILD CASES

- Oral omega-3 and/or omega-6 supplementation daily
- Topical therapy- keratolytic shampoos and emollient rinses/humectants every 2-4 days

SEVERE CASES

- High doses of oral fatty acid supplementation daily
- Propylene glycol in water (50-70%) spray or water based moisturizing spray daily
- Baby or mineral oil soaks (2-3 hours) followed by bathing to remove excess oil repeated weekly until condition has improved, then every 2-4 weeks for maintenance

ADDITIONAL MEDICATIONS

VITAMIN A

- 1000 IU/kg by mouth every 24 hours
- Tetracycline / Niacinamide
- Dogs weighing less than 10kg- 250mg of each by mouth every 8 hours
- Dogs weighing more than 10kg- 500mg of each by mouth every 8 hours

PREDNISONE

- 2 mg/kg by mouth every 24 hours until lesions are controlled, then tapered slowly to reach the lowest every other dose that controls clinical signs

ISOTRETINOIN OR ACETRETIN

- 1 mg/kg by mouth every 12-24 hours until lesions are improved, then tapered to every 24-48 hours or 0.5mg/kg every 24 hours
- Liver enzyme values should be monitored every 2 weeks during induction
- Requires extensive owner consent to be prescribed

CYCLOSPORINE (ATOPICA)

- 5 mg/kg by mouth every 24 hours
- This is the only treatment which may lead to an increase in sebaceous glands in addition to clinical improvement
- Treatment with appropriate antibiotics or antifungals if secondary bacterial or yeast infection is present
- Early diagnosis and treatment often leads to a better long term prognosis

COMMENTS

- Sebaceous adenitis is inherited as an autosomal recessive condition in Standard Poodles and Akitas, therefore, affected dogs should not be bred
- Sebaceous adenitis is a condition where sebaceous glands become inflamed and are eventually destroyed
- Definitive diagnosis is made via skin biopsy and dermatohistopathology
- Shorter-coated dogs may have milder clinical signs, leading to a better prognosis than longer-coated dogs.
- Some dogs have periods of spontaneous improvement and worsening that occurs independently of treatment
- Multiple therapies may be necessary to treat this condition

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