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Seborrhea In Dogs

*Management in Shelters
and Foster Homes*

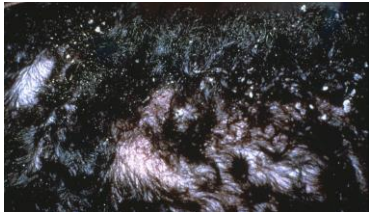
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'Seborrhea'- term is obsolete

Correct term: cornification defect

*Excessive scales (flakes, 'dandruff') with or without oily skin
and hair.*



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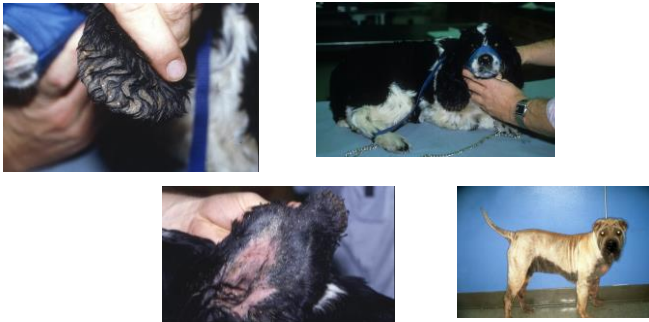


'Seborrhea' is....

- Clinical description, not a diagnosis
- Disruption in production epidermal cells and
- Causes
 - Primary-Hereditary-noted early in life, life long
 - Secondary-acquired, occurs as a result of other diseases, temporary
- Most common in dogs

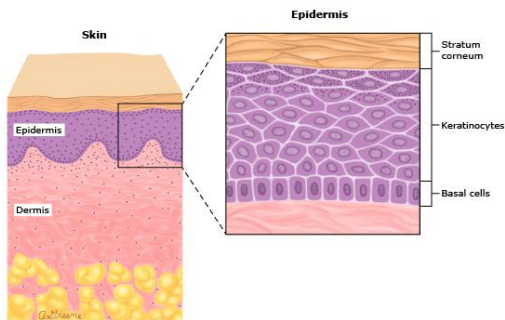


Odor and scales that do not wash off...






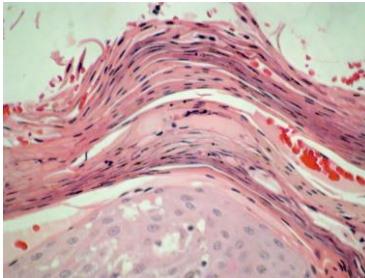
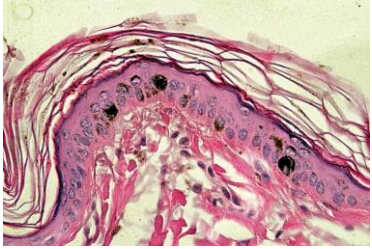
Practical Anatomy




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Cornification




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Importance of Epidermal Barrier

- Prevents excessive water loss from skin
- Prevents loss of other bodily fluids
- Protects against UV damage
- Protects against trauma
- Part of the body's immune system
- Prevents against infection and invasion of micro-organisms

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Pathogenesis of Clinical Signs

- **Accumulations of scale and crust** because of shortened epidermal cell turnover

- **Irritation, inflammation, pruritus and odor** develop because of changes in the composition of surface oils

- **Frequent bacterial and yeast overgrowth/infections often with pruritus** due to changes in the skin flora


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‘Seborrhea sicca’-dry ‘Seborrhea oleosa’-greasy


- Clinical descriptors
- Not a specific disease
- Only of importance when determining topical therapy
- Avoid use of these terms!!!!

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Primary Cornification Defect

- Hereditary with breed predisposition or random genetic abnormality
- Noted early in life for many conditions
- Manage, not cure
- Diagnose via ruling out other causes



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Primary Breed Predisposition

- Primary cornification disorder
 - West Highland white terrier, cocker spaniel, basset hound, Doberman pincher, German shepherd, English springer spaniel, Irish setter, Labrador retriever
- Vitamin A-most notably cocker spaniel
- Zinc responsive
 - Alaskan malamute, Siberian husky, Samoyed, Pharaoh hound
- Epidermal dysplasia-West Highland white terrier
- Ichthyosis-golden retrievers, Jack Russell terrier, Norfolk terrier, American bull dog

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Primary Cornification



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Severe Odor



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Vitamin A




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Zinc




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Ichthyosis



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Really, really big scales



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Localized Disease



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Localized Disease

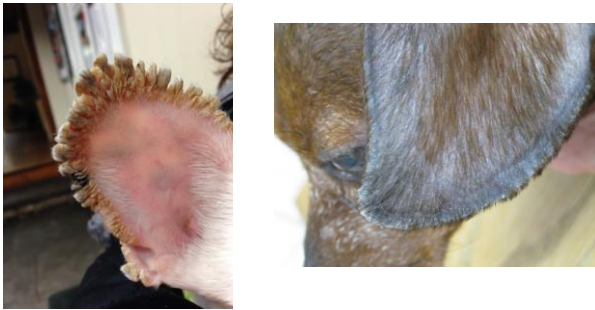


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Localized Disease



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Secondary Cornification



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Secondary to bacterial pyoderma



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Secondary to parasites....

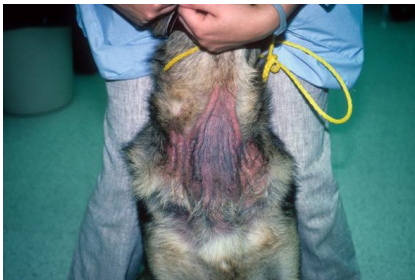


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Secondary to yeast overgrowth



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Common problem in allergic dogs..



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Common in dogs with medical illnesses..



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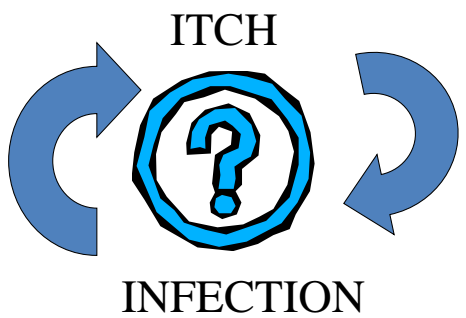
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Common Scenario




ITCH

INFECTION

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Spending Money Wisely

- Consider global health of dog and address issues
 - Vaccination
 - Nutrition
 - Endo-parasite control
- Assume seborrhea is secondary, until proven otherwise
 - Ectoparasite control
 - Skin cytology for bacterial or/yeast overgrowth




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What does this 'look like'?

- Intake: vaccinations, standard deworming, appropriate diet and adequate feeding
- Flea control/contagious parasite treatment q 2 weeks for 6 weeks
- In house diagnostics
 - Hair trichogram to look for demodicosis
 - Skin cytology for yeast
 - Wood's lamp-high risk of false positives
 - Bacterial overgrowth is common, at least treat topically


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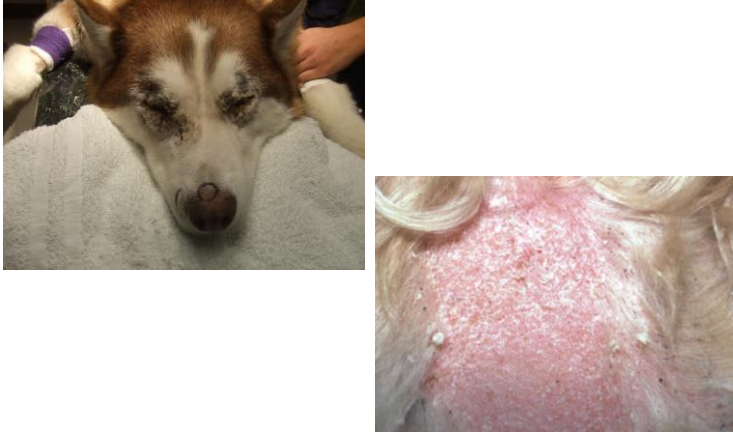
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Other Diagnostics

- If animal is otherwise healthy, routine laboratory work is rarely helpful
- Allergy work up?
- Thyroid function tests?
- Adrenal function tests?
- Skin biopsy indications


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Diagnosis Via Biopsy

- Vitamin A responsive skin disease
- Zinc responsive skin disease
- Medical conditions-cutaneous lymphoma
- Sebaceous adenitis
- Lichenoid psoriasiform dermatitis of springer spaniels
- Nasal parakeratosis-when ruling out from immune mediated
- Maybe helpful in ichthyosis, primary cornification diseases..

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Lichenoid psoriasiform dermatitis



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Bathing and Grooming

- Always indicated
- Cannot over bathe the dog



Google images

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Topical Therapy-What You Need

- ONE cleansing shampoo
- One combined antibacterial/antifungal shampoo
- One combination tar and sulfur or salicylic acid shampoo
- One good degreasing shampoo
 - *Benzoyl peroxide* (degreasing and antimicrobial)
- One moisturizing product
 - 50% propylene glycol
 - Commercial product
- One non-irritating ear cleaner

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Shampoo Therapy Simplified

- Step 1: Instill ear cleaner
- Step 2: Bathe dog in a cleansing shampoo to remove debris
 - Apply pre-diluted shampoo (1:2 - 1:4), wash, rinse
- Step 3: Alternate bathing with antimicrobial shampoo and anti-seborrheic shampoo
 - Apply pre-diluted shampoo (1:2 - 1:4), wash, rinse
- Rinse again and again
- Step 4: Finish cleaning ears

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Seborrheic Otitis

- Increased ear secretions
- Ceruminous otitis leads to bacterial overgrowth and chronic inflammation and ODOR
- Treat microbial overgrowth
- Clean ears at every bath
- Topical ear steroids maybe very helpful
 - 1:1 dilution of propylene glycol and 2mg/kg of dexamethasone





How Often???



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Nasal and Digital Hyperkeratosis



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Ear Margin Hyperkeratosis



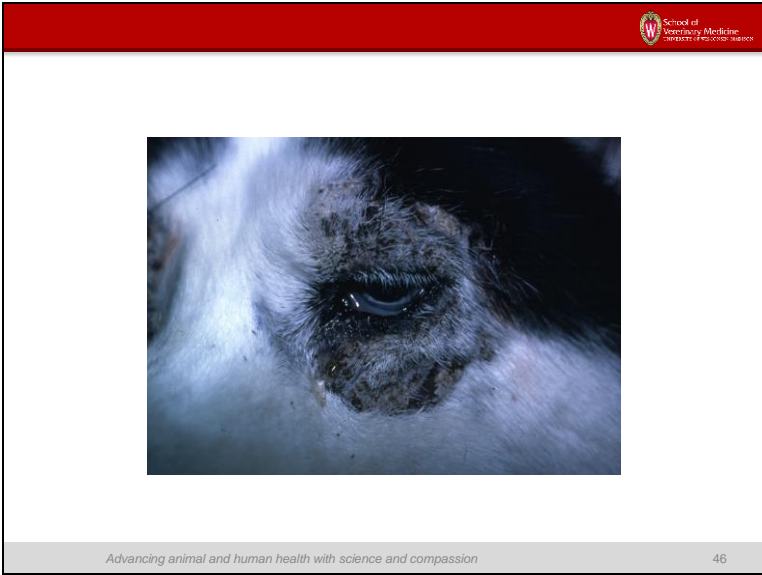
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Medical Treatment?



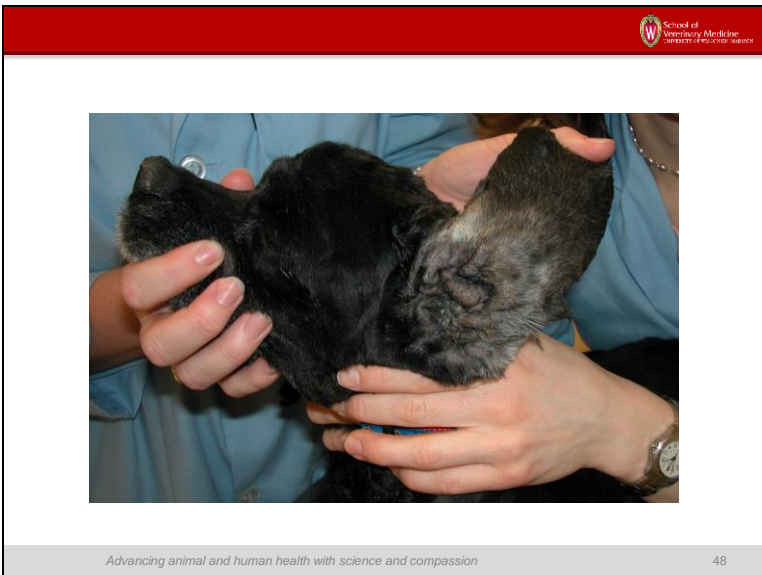
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What Foster Families Can Do

- Dog with chronic seborrheic otitis
 - Important to determine if medical or surgical
 - 30 day treatment period needs to be done in a home
 - 1 mg/kg orally once daily for 15-30 days

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For example.....



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Dog that needs temporary intensive bathing to achieve remission




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Or this..... Do not squeeze!



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Transitioning to a Permanent Home

- Information on what best controls the odor and scale
 - What's the most you have to do and when?
 - What are the early signs of a relapse?
 - What products work? Or what products are irritating?
- Information on all diagnostic testing
 - Is problem secondary?
 - If secondary what does new primary care veterinarian need to pursue?

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