

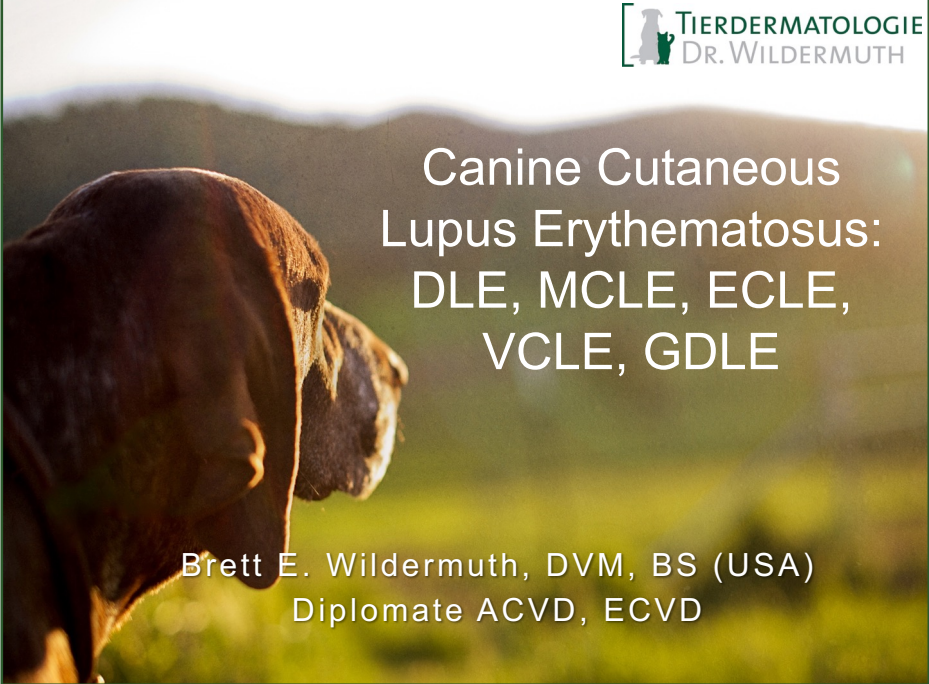


Canine Cutaneous
Lupus Erythematosus:
DLE, MCLE, ECLE,
VCLE, GDLE

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Diplomate ACVD, ECVD



Lupus – Wolf
Hippocrates first to use as description calling it “herpes
esthiomenos” meaning “gnawing dermatosis”

Lupus erythematosus

- Group clinical syndromes share an autoimmune process:
 - Antibodies or lymphocytes against normal body constituents
- Forms
 - Systemic Lupus Erythematosus (SLE)
 - Chronic Cutaneous Lupus Erythematosus:
 - **(Facial) Discoid Lupus Erythematosus (DLE)**
 - **Mucocutaneous Lupus Erythematosus (MCLE)**
 - **Exfoliative Cutaneous Lupus Erythematosus (ECLE)**
 - **Generalised Discoid Lupus Erythematosus (GDLE)**
 - Subacute Cutaneous Lupus Erythematosus
 - **Vesicular Cutaneous Lupus Erythematosus (VCLE)**

Discoid Lupus Erythematosus (DLE)

- DLE common
 - Common breeds:
 - Collies, German Shepherd
 - 7.0y (1.0y – 12.0y)

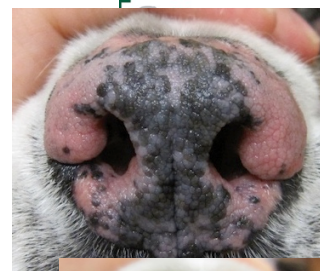


DLE Symptoms

- Location: above the shoulders
 - **Planum nasale**
 - Bridge of the nose
 - Lips, periorcular, pinnae, 3. Lid
- Early:
 - Depigmentation, loss of texture
- Later
 - Erosion, Ulceration
 - Rarely: strong Bleeding, Solar Dermatitis +/- Squamous Cell Carcinoma



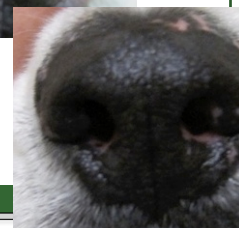
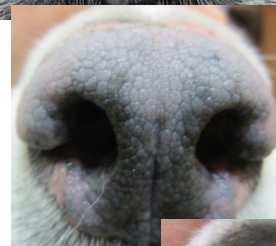
Normal

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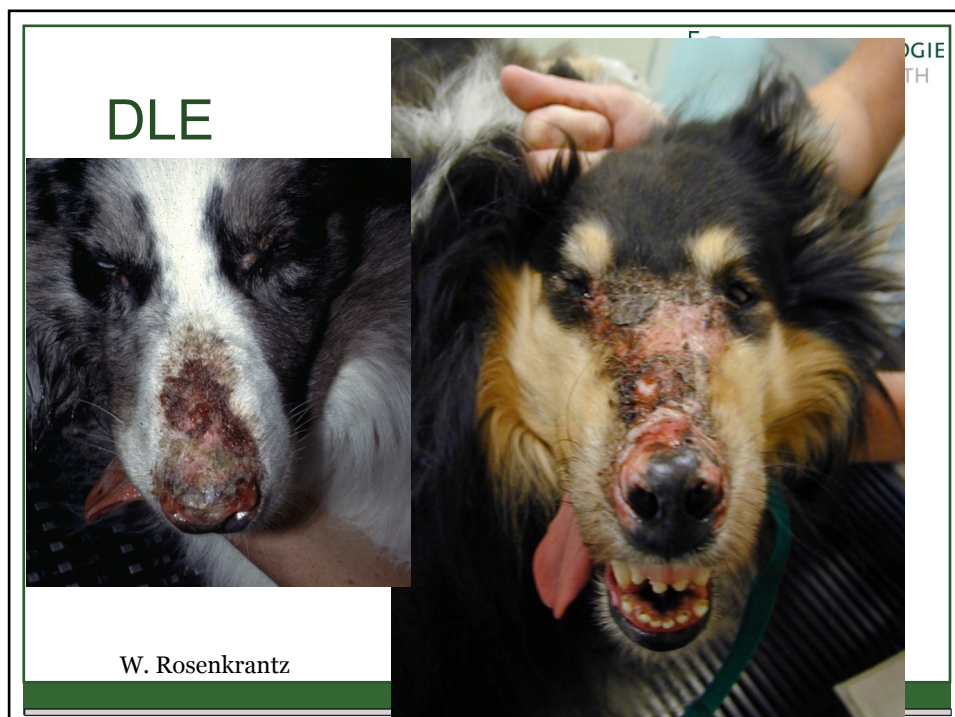
Vitiligo

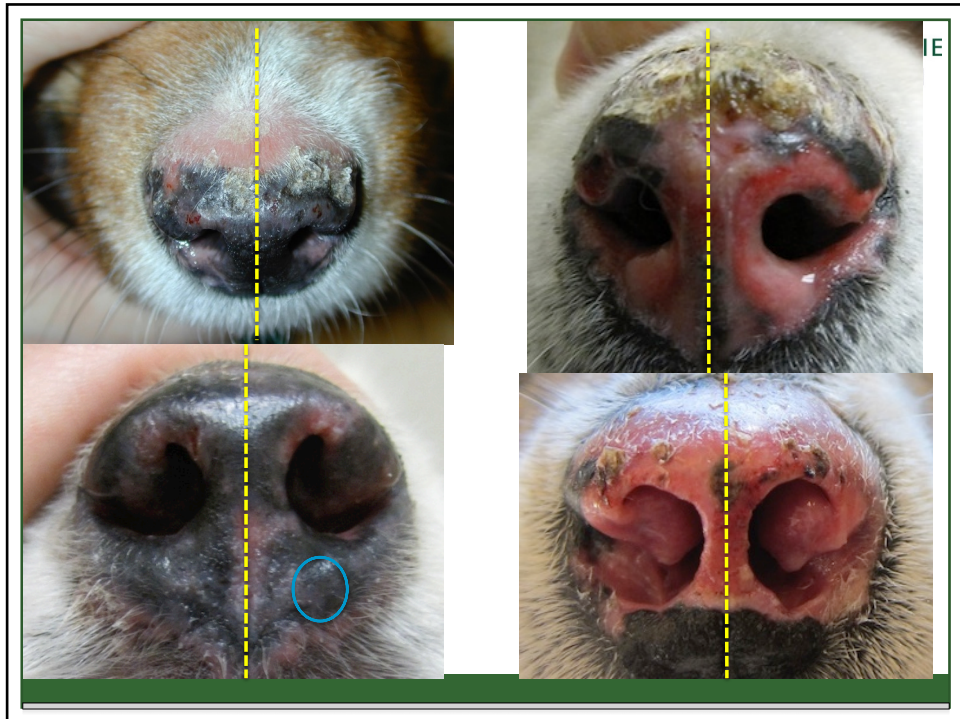


DLE



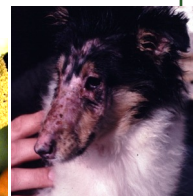
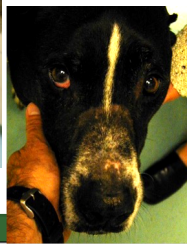
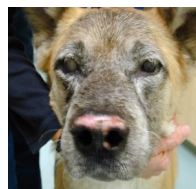
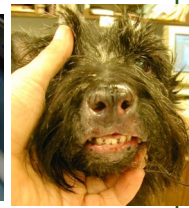




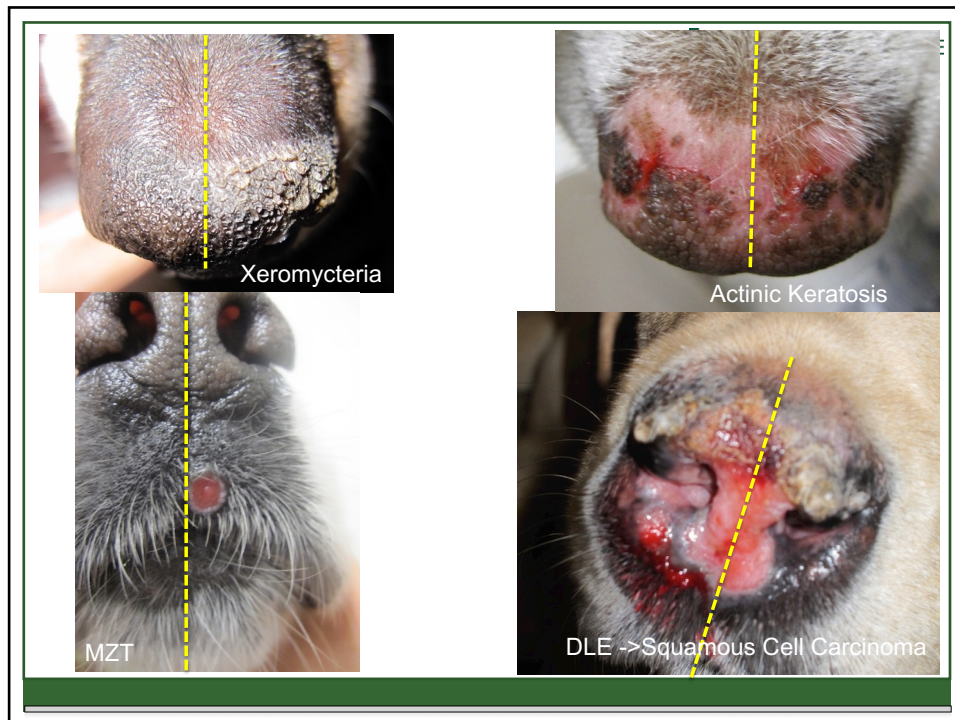


DLE Differential Diagnosis

- Pemphigus foliaceus
- Mucocutaneous pyoderma
- Hereditary nasal hyperkeratosis of Labrador retrievers
- Cutaneous Lymphoma
- Uveodermatologic syndrome
- Dermatomyositis
- Dermatophytosis







DLE Diagnosis

- Histopathology
 - “Interface dermatitis”:
 - Lymphocyte rich interface dermatitis
 - hydropic degeneration
 - thickening BMZ
 - pigmentary incontinence
 - Apoptosis (basal cell layer)
- ANA test often negative

DLE Therapy Options

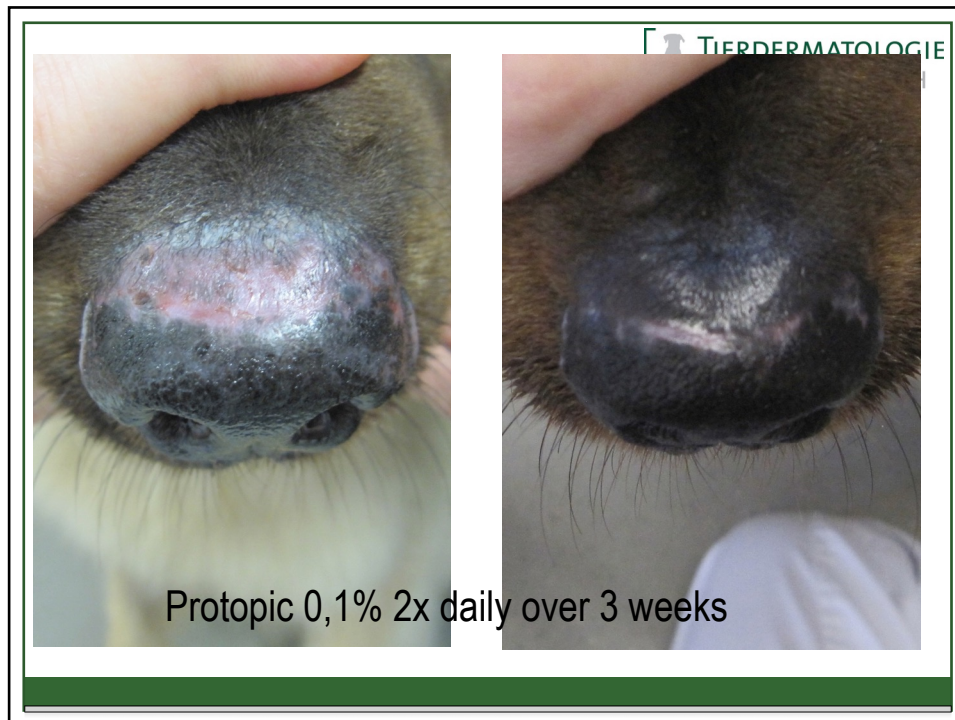
- Topical Therapy:
 - Tacrolimus (Protopic) 0,1% 2x daily
 - Pimecrolimus (Elidel)
 - Triamcinolone 0,1% 2x daily
- Systemic Therapy:
 - Glucocorticoids: Prednisone/Prednisolon
 - 1mg/kg 1-2 times daily then taper (goal every other day)
 - Ciclosporin 5mg/kg once daily
 - Azathioprine 2mg/kg once daily
 - Doxycycline 5mg/kg 2 times daily & Niacinamide 250-500mg 3 times daily?
 - Long-term antibiotic therapy is not recommended anymore







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Protopic 0,1% 2x daily over 3 weeks

Mucocutaneous Lupus Erythematosus (MCLE)

- Ulceration on the border between haired skin and mucous membranes:
 - Periorcular perioral, perinasal, perianal, perigenital
- 20 Cases: Olivry Vet Derm, 2012
 - 11/20 (55%) DSH or cross
 - Alter 3-13 y (x: 6 y)
 - Dyschesia +/- Dysuria 13/20 (65%)
 - Lesions vulvar/perivular 12/20 (60%)
 - Anal/perianal 11/20 (55%)

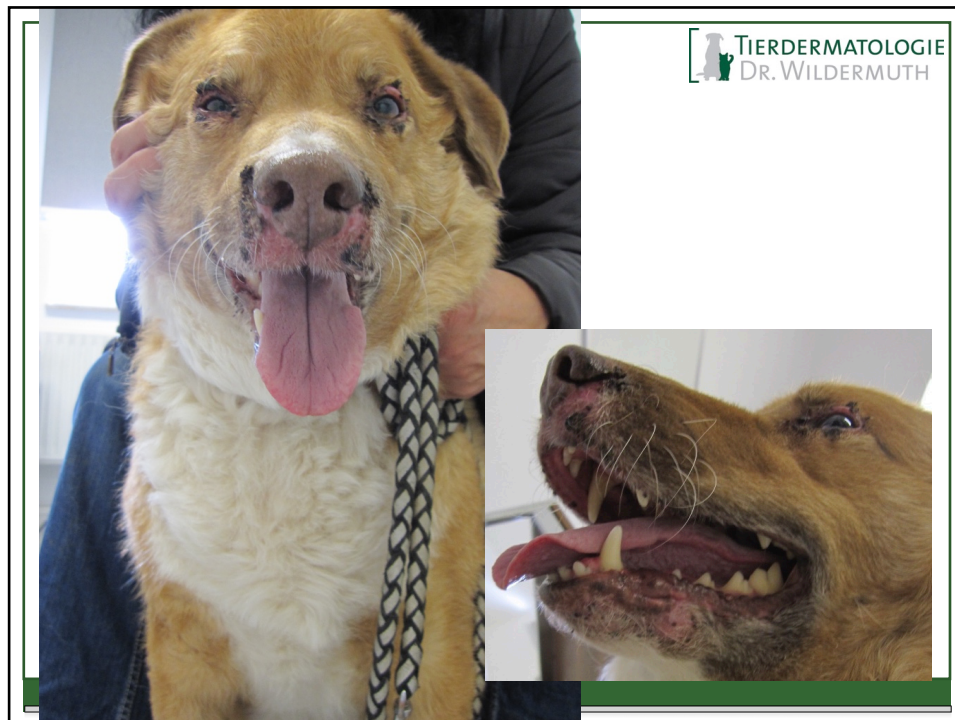






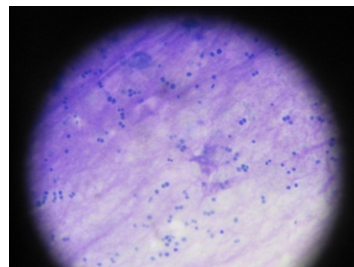
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Mucocutaneous Lupus Erythematosus (MCLE)

- Diagnosis:
 - Cytology and when Pyoderma is present, but there is no response or only partial response to antibiotic therapy
 - Top differential diagnosis is **mucocutaneous pyoderma**
 - Biopsy



DDx: Leishmaniasis

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Ramon Almela

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R. Almela

MCLE Therapy Options

- Topical Therapy:
 - Tacrolimus (Protopic) 0,1% 2x daily
 - Pimecrolimus (Elidel)
 - Triamcinolone 0,1% 2x daily
- Systemic Therapy:
 - Glucocorticoids: Prednisone/Prednisolon
 - 1mg/kg 1-2 times daily then taper (goal every other day)
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 - Doxycycline 5mg/kg 2 times daily & Niacinamide 250-500mg 3 times daily?
 - Long-term antibiotic therapy is not recommended anymore

Exfoliative Cutaneous Lupus Erythematosus (ECLE)

- German Shorthaired Pointer (and related breeds)
 - Hereditary
- Scale & alopecia
 - Progressive or may wax and wane
 - Pruritus is minimal
 - Possible:
 - Anemia
 - Thrombocytopenia
 - Lameness (joint disease)



ECLE

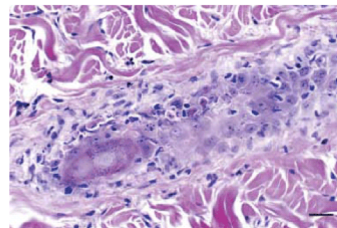
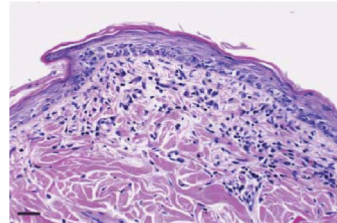


ECLE



ECLE

- Diagnosis: Breed, Clinical & Biopsy
 - Hyperkeratosis, basal cell degeneration and apoptotic epidermal cells with a lymphocytic interface dermatitis
 - Sebaceous adenitis and/or a lack of glands



ECLE Therapie

- 6 GSP treated with cyclosporine, Plaquenol (hydroxychloroquine) and Humira (adalimumab) (Mauldin, *Vet Derm* 2010)
- Five: CsA and had decreased joint pain and stiffness and reduced erythema
 - did not halt disease progression
- 2/3 received hydroxychloroquine with mild improvement
- 4 dogs were ultimately euthanized, remaining 2 dogs treated with adalimumab (a TNF-alpha antagonist), at 0.5mg/kg q 2 wks SQ for 12 weeks with temporary improvement
- None of the therapies produced long-term complete remission

ECLE Mauldin, Vet Derm 2010

- 6 Dogs
 - 5 Ciclosporine: less joint pain and erythema, still progressive
 - 2/3 Hydroxychloroquine mild improvement
 - 4 Euthanasid andere 2:
 - Adalimumab (a TNF-alpha antagonist) at 0.5mg/kg alle 2 Wo. für 12 Wo. vorübergehende Wirkung
- No therapy led to longterm remission

Vet Dermatol. 2019 Aug;30(4):350-e102. doi: 10.1111/vde.12747. Epub 2019 Apr 30.

Treatment of exfoliative cutaneous lupus erythematosus in a German shorthaired pointer dog with mycophenolate mofetil.

Ferrigno A¹, Hoover K¹, Blubaugh A¹, Rissi D², Banovic F¹.

- 3 yo MC German Shorthair Pointer
- Mycophenolate Mofetil (MMF) 22 mg/kg 2x daily
 - Within 3 weeks: lameness much better, less erythema and scale
 - After 4 months: no longer erythematous and scaly
 - Longterm dose: 10mg/kg

Vesicular Cutaneous Lupus Erythematosus (VCLE)

- Breeds:
 - Shetland sheepdog, rough coated collie, border collie
- Age:
 - 5.5 y (2.0y–11.0y)
- Lesions Axilla, Inguinal, Pinnae, Perimucosal:
 - annular, polycyclic, irregular Ulcerations

Vesicular cutaneous lupus erythematosus (VCLE)



Vesicular cutaneous lupus erythematosus (VCLE)





Vesicular cutaneous lupus erythematosus (VCLE)

- **Diagnosis: Biopsy**
 - lymphocyte-rich interface dermatitis and folliculitis
 - Vesiculation at the dermal-epidermal junction

Jackson, Vet Dermatol, 2004

VCLE Therapy

- **11 Dogs (Jackson, H.A. Vet Dermatol, 2004)**
 - 8: 75–100% Improved
 - 5 Glucocorticoids & Azathioprine
 - 1 Glucocorticoids & Doxycycline
 - 1 only Glucocorticoids systemic
 - 1 only Glucocorticoids local
- **Banovic et al 2017:**
 - **Ciclosporin/Tacrolimus very effective 8/8 dogs**

[BMC Vet Res.](#) 2018; 14: 132.

PMCID: PMC5907183

Published online 2018 Apr 18. doi: [10.1186/s12917-018-1446-8](https://doi.org/10.1186/s12917-018-1446-8)

PMID: [29669547](https://pubmed.ncbi.nlm.nih.gov/29669547/)

Cutaneous lupus erythematosus in dogs: a comprehensive review

[Thierry Olivry](#)^{1,2}, [Keith E. Linder](#)^{2,3} and [Frane Banovic](#)⁴

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Generalized Discoid Lupus Erythematosus (GDLE)

- Generalized cutaneous inflammatory disease
 - not restricted to the face like DLE
 - Histologically looks like lupus, but ANA titers are negative and no systemic disease
- Lesions:
 - Alopecic patches with reticulated hyperpigmentation and fine peripheral scaling
 - Axillae, thorax, abdomen, inguinal region, and thighs



Questions?