Interface Disorders

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Interface pattern

- Superficial perivascular dermatitis with obscuring of the DEJ interface
- Due to
 - (1) vacuolar alteration
 - (2) lichenoid infiltrate
 - Or both
- Immune rxn targeting basal keratinocytes and BMZ

Interface

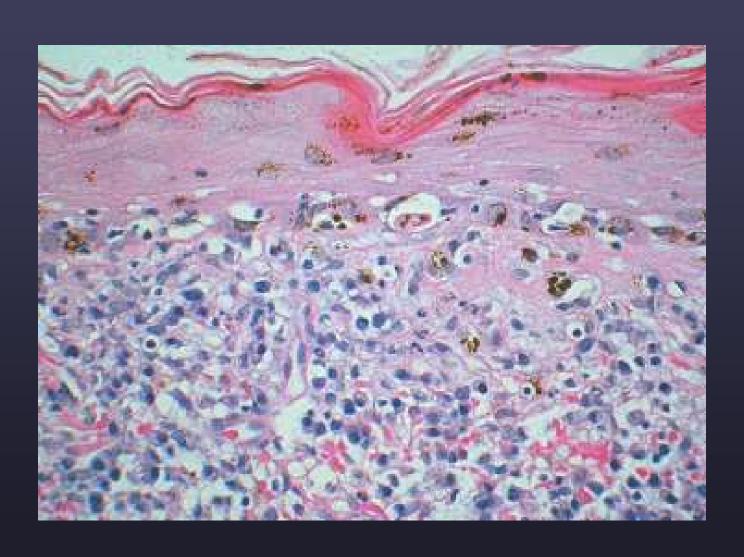
- Vacuolar alteration (hydropic degeneration/vacuolar change)
 - Does not always have a lichenoid infiltrate

- Lichenoid Infiltrate
 - Always associated with vacuolar alteration

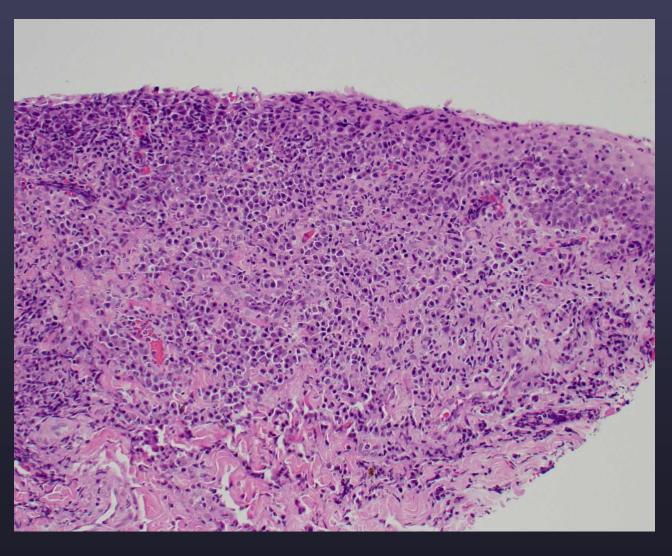
Problems with "Lichenoid" and "Interface" in Veterinary Dermpath

- Both terms are often used incorrectly
- #1 Can see subtle "interface-type" changes in many inflammatory reactions
- #2 Lichenoid has two interpretations
 - Should imply interface change
 - Also used to describe a band of inflammatory cells without interface change
- "Lichenoid interface"- now being used when there is lichenoid inflammation with interface change

Lichenoid

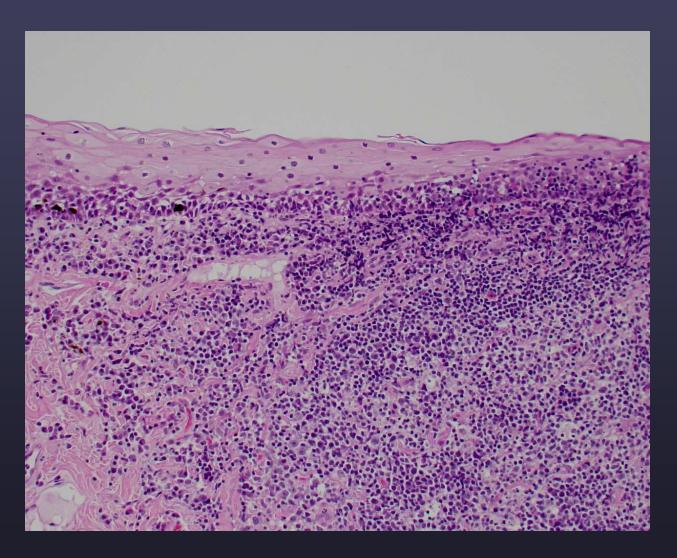


Is this Lichenoid?

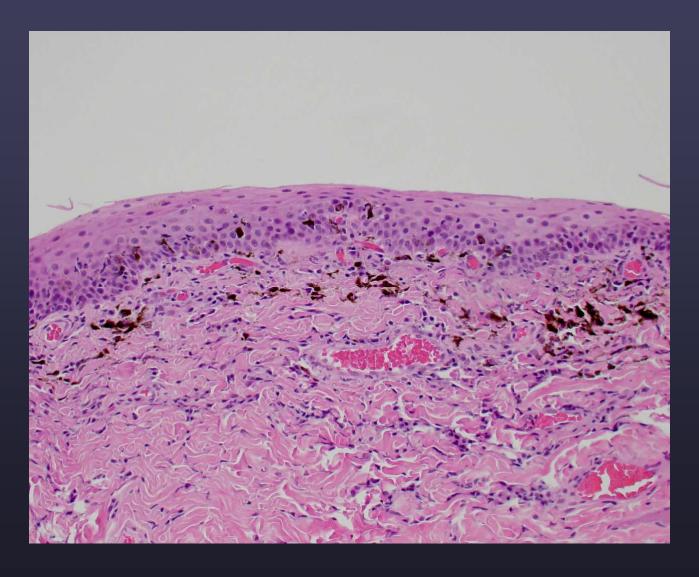


Plasmacytic gingivitis in a cat

Is this lichenoid?



Interface or Not?



Same case as last slide, pigmentary incontinence

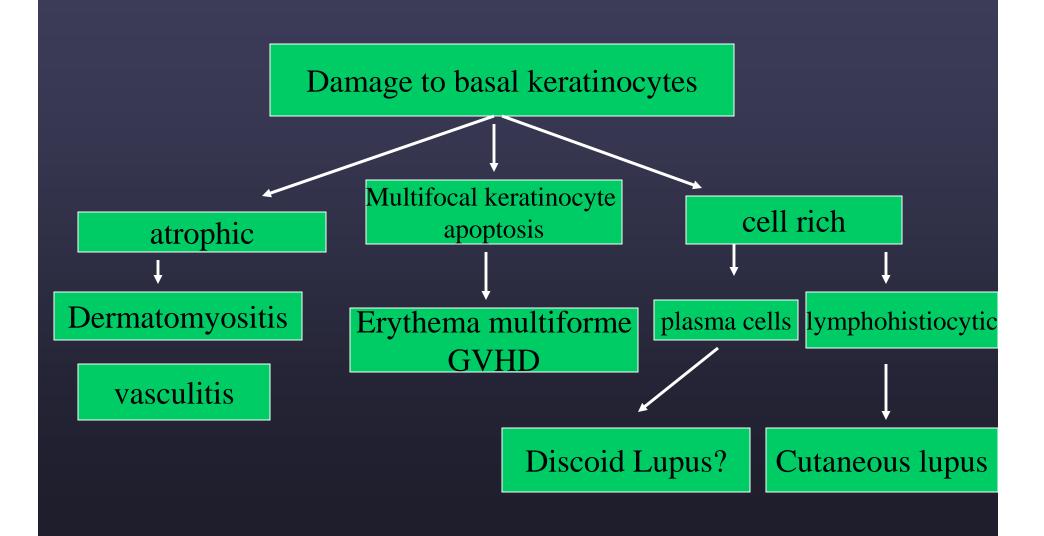
- Lichenoid?: inflammation of mucous membranes nonspecific band of inflammatory cells
- Vacuolar alteration: seen with any inflammatory infiltrate that extends to the DEJ
- Apoptotic or necrotic keratinocytes can be seen incidentally in many inflammatory rxns
- Pigmentary incontinence is not a specific change to interface rxns

Use terms carefully!

Interface disorders

- Erythema multiforme/drug eruption
- Thymoma associated dermatosis
- Lupoid disorders
 - Cutaneous vesicular lupus
 - Exfoliative lupus
 - Discoid lupus
- Dermatomyositis
- Rabies vaccine associated ischemic dermatopathy
- Graft vs. Host disease
- Symmetric lupoid onychodystrophy (onychitis)

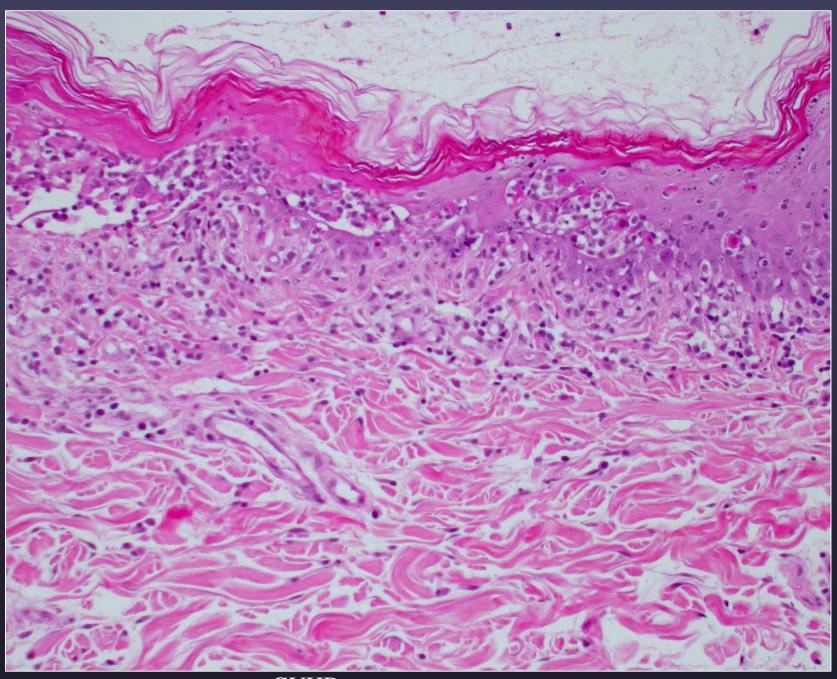
Interface dermatitis



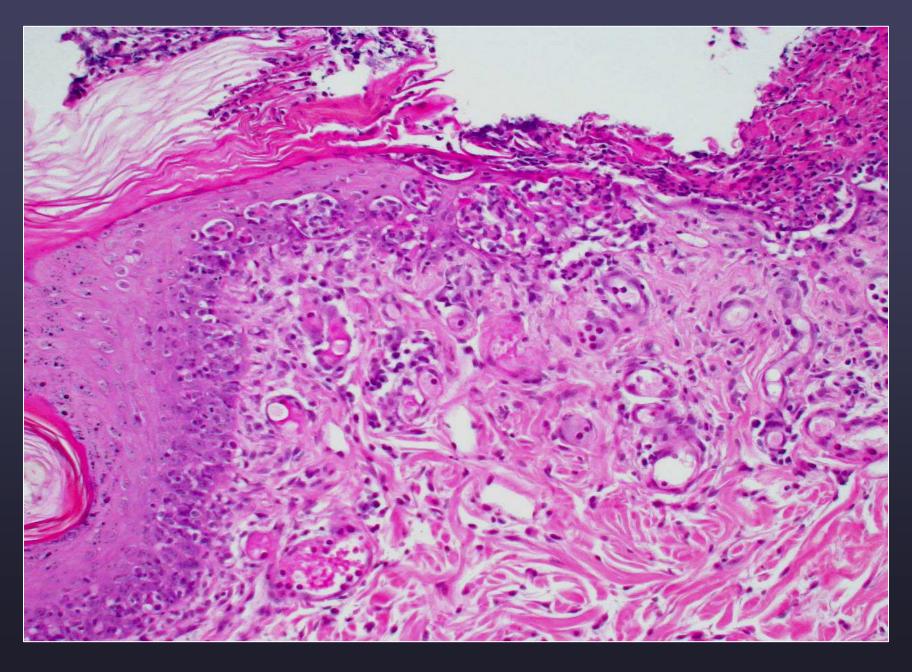


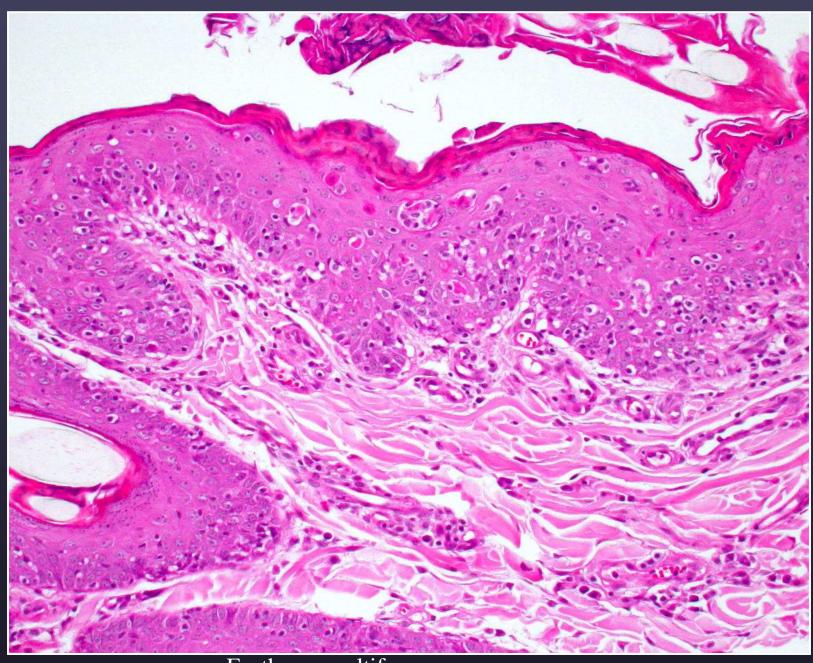
GVHD





GVHD





Erythema multiforme

Erythema Multiforme

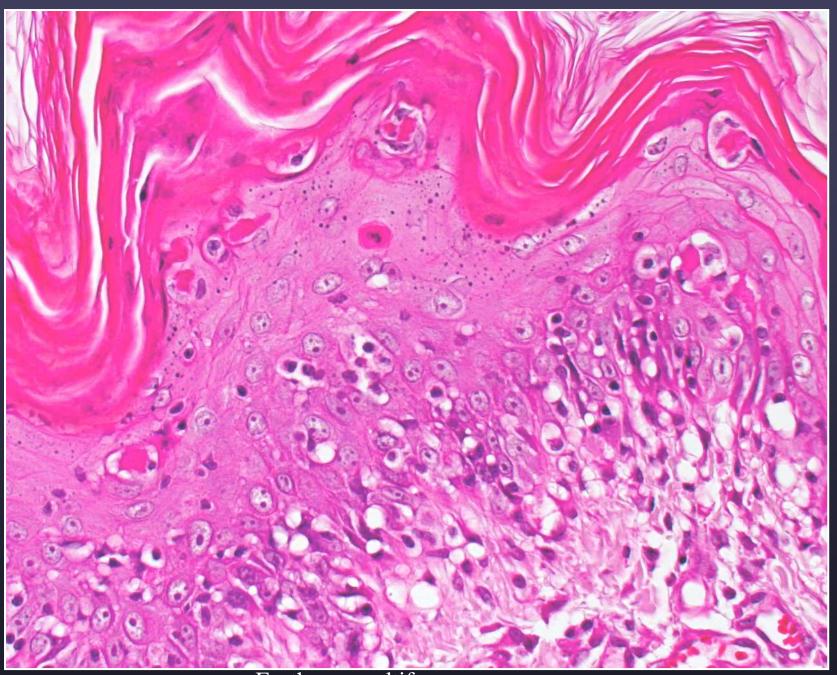
- Mutifactorial *cutaneous rxn pattern*
- EM Major/SJS
 - Drugs, infectious dz, neoplasia
 - Young dogs- more likely drug-associated
 - Old dogs- more likely idiopathic
- TEN/SJS distinction- clinical features
 - Pathologists view TEN

Erythema Multiforme

- Ulcerated serpiginous to targetoid erythematous ulcers and plaques
 - Hyperkeratotic and ulcerated
- +/- mucous membrane involvement

Interface Disorders – cell poor

- Erythema multiforme
- Multiforme = MULTIPLE FORMS!
 - Transepidermal individual keratinocyte necrosis/apoptosis
 - Satellitosis
 - Hyperkeratosis (orthokeratotic to parakeratotic) with multifocal ulcers



Erythema multiforme

EM/SJS/TEN

- Many diseases with individually necrotic/apoptotic cells ≠ equivalent with EM
- Limited in our indentification and documentation of patterns of eruptions
- Histopathology provide DDX for drug eruption in veterinary medicine



Idiopathic Erythema Mulforme





EMM/SJS