

ECVP/ESVP Summer School in Veterinary Pathology

Summer School 2012 – Mock Exam

Slide n° 7. Tissue from a dog

Description:

Haired skin. Epidermis is slightly thickened (acanthosis), segmentally necrotic or absent and covered with loosely arranged layers of orthokeratotic keratin. Within various levels of epidermis and hair follicular infundibular epithelium there are small to moderate numbers of solitary and grouped hypereosinophilic and shrunken apoptotic keratinocytes. There is moderate hyperplasia of basal keratinocytes with increased number of mitotic figures; mild vacuolization of occasional keratinocytes and moderate numbers of lymphocytes scattered within basal layers of epidermis and obscuring the dermal-epidermal interface. Dermis is multifocally disrupted by large deposits of basophilic, granular material (mineral) deposited within collagen fibers which are thickened and fragmented and surrounded by small to moderate numbers of macrophages admixed with smaller numbers of lymphocytes. Mineralization also affects hair follicles which are diffusely atrophic in telogen stage with occasional small, thin epithelial cord remnants of catagen stage and small dermal papilla. There is variable sebaceous gland atrophy and mild lymphocytic perifollicular infiltrates.

Morphologic diagnosis/es:

1. Dermatitis, necrotizing and interface, diffuse, subacute, moderate with multifocal keratinocyte apoptosis;
2. Dermal mineralization, multifocal, subacute, severe, with granulomatous dermatitis and follicular atrophy

Name the disease/s:

1. Erythema multiforme
2. Hyperadrenocorticism (Cushing's disease)/ Calcinosis cutis

Design	2
Tissue : haired skin	1
Descriptive features	
Changes in epidermis	
Multifocal parakeratosis	0.5
Necrosis, segmental	1
Apoptosis of keratinocytes	1
Affected various levels of epidermis	1
Also affects hair follicles	0.5
Basal keratinocytes hyperplastic/mitosis	1
Lymphocyte infiltrate in basal layers of epidermis/satellitosis	1
Obscured dermo-epidermal interface	1
Changes in dermis	
Mineralization and degeneration of collagen fibers	1
Macrophages, giant cells and lymphocytes around collagen fibers	1
Changes in hair follicles	
Atrophy of hair follicles and sebaceous glands	1
Telogen stage hair follicles remaining	1

Morphologic diagnosis/es:

1. Diffuse subacute moderate (0,5) necrotizing and interface (0,5) dermatitis (0,5) with multifocal keratinocyte apoptosis (0,5)

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2. Multifocal subacute severe (0,5) dermal mineralization (0,5), and follicular atrophy (1) (Atrophic dermatosis also accepted).	2
Name the disease/s:	1
1. Erythema multiforme	1
2. Hyperadrenocorticism (Cushing's disease)	
Total	20