CMHD Pathology Report

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ReportID: Report Date: May 07, 2013
Pathologist: Dr. H. Adissu

CMHD LabID: N13-244

Relevant History:
Phenotype:

abnormal coat appearance
sparse hair
rough coat
excessive scratching
integument phenotype
hyperkeratosis
parakeratosis

AnimalID: M00403293 (Male)

Histopathology Findings:

thymus (MA:0000142)

Histopath Description:
There is a 100 um diamater epithelial cyst.

Morphological Diagnosis:
Distribution: focal; **MPATH Diagnosis:** cyst MPATH:62

Definitive Diagnosis:
Epithelial cyst

Histopathology Comments:
This is a developmentalabnormality commonly seen in mice.

retina (MA:0000276)

Histopath Description:
Involving one eye, there are clusters of external nuclear structures within the internal plexiform layer.

Morphological Diagnosis:
Distribution: Focal; **Severity:** mild;

Definitive Diagnosis:
Retinal dysplasia

salivary gland (MA:0000346)

Histopath Description:
There are multifocal perivascular mononuclear inflammatory cell aggregates.

Morphological Diagnosis:
Distribution: multifocal; **Severity:** mild;

Definitive Diagnosis:
Interstitial inflammatory aggregates

stomach (MA:0000353)

Morphological Diagnosis:
Distribution: multifocal; **Severity:** mild;

Definitive Diagnosis:
Gastritis, lymphoplasmacytic and neutrophilic

liver (MA:0000358)

Histopath Description:
severe lipidosis

Morphological Diagnosis:
Distribution: diffuse; **Severity:** severe; **MPATH Diagnosis:** steatosis MPATH:622

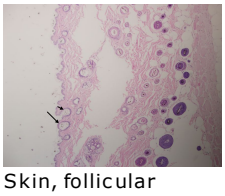
Definitive Diagnosis:
Hepatic lipidosis

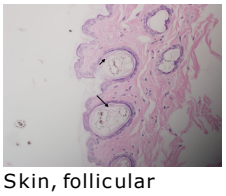
skin (MA:0000151)

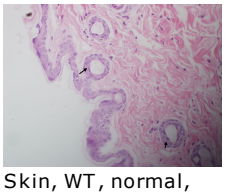
Histopath Description:
A segments of hair follicle proliferation (Anagen) and arrest (telogen) are evident in the examined section. Multifocally, follicular infundibula are distended and containe small amount of keratin (lesions are milder compared to M00403292).

Morphological Diagnosis:
Distribution: multifocal; **Severity:** mild;

Definitive Diagnosis:
Follicular distension (ectasia)


Skin, follicular distension, 10x, HE


Skin, follicular distension, 40x, HE


Skin, WT, normal, HE

AnimalID: M00403292 (Male)

Histopathology Findings:

salivary gland (MA:0000346)

Histopath Description:
There are multifocal perivascular mononuclear inflammatory cell aggregates.

Morphological Diagnosis:
Distribution: multifocal; **Severity:** mild;

Definitive Diagnosis:
Interstitial inflammatory aggregates

liver (MA:0000358)

Histopath Description:
severe lipidosis

Morphological Diagnosis:
Distribution: diffuse; **Severity:** severe; **MPATH Diagnosis:** steatosis MPATH:622

Definitive Diagnosis:
Hepatic lipidosis

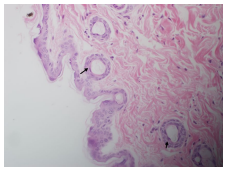
skin (MA:0000151)

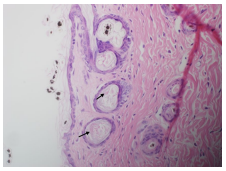
Histopath Description:
A segments of hair follicle proliferation (Anagen) and arrest (telogen) are evident in the examined section. Multifocally, follicular infundibula are distended by loosely organized (follicular keratosis). There is a single multinucleated giant cells within the junction of the dermis and hypodermis.

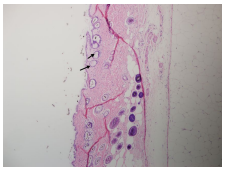
Morphological Diagnosis:
Distribution: multifocal; **Severity:** mild;

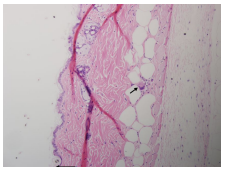
Definitive Diagnosis:
Follicular keratosis and ectasia

Histopathology Comments:
The single multinucleated cell suggests a foreign body reaction secondary to hair fragment (a likely consequence of scratching)


Skin, WT, normal, HE


Skin, Follicular keratosis and ectasia, 40x, HE


Skin, Follicular keratosis and ectasia, 10x, HE


Skin, multinucleated giant cell, 40x, HE

AnimalID: M00393070 (Female)

Histopathology Findings:

salivary gland (MA:0000346)

Histopath Description:
There are multifocal perivascular mononuclear inflammatory cell aggregates.

Morphological Diagnosis:
Distribution: multifocal; **Severity:** mild;

Definitive Diagnosis:
Interstitial inflammatory aggregates

liver (MA:0000358)

Histopath Description:
moderate lipidosis

Morphological Diagnosis:
Distribution: diffuse; **Severity:** severe; **MPATH Diagnosis:** steatosis MPATH:622

Definitive Diagnosis:
Hepatic lipidosis

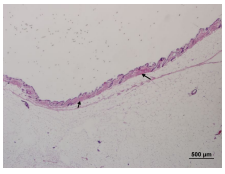
skin (MA:0000151)

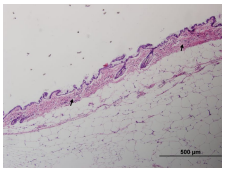
Histopath Description:
Hair follicles are at arrested stage of cycle (telogen). Occasionally hair follicles ostia are dilated and contain abundant. Some segments (as long as 0.5-1 mm) are devoid of hair follicles.

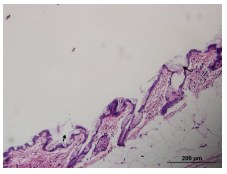
Morphological Diagnosis:
Distribution: multifocal; **Severity:** mild;

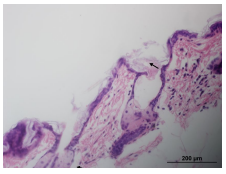
Definitive Diagnosis:
Segmental follicular absence with follicular keratosis and ectasia

Histopathology Comments:
see comment above


Skin, segmental follicular absence, 4x, HE


Skin, segmental follicular absence, 10x, HE


Skin, follicular keratosis and distension, 20x, HE


Skin, follicular keratosis and distension, 40x, HE

AnimalID: M00393071 M00393071 (Female)

Histopathology Findings:

liver (MA:0000358)

Histopath Description:
moderate lipidosis

Morphological Diagnosis:

Distribution: diffuse; **Severity:** severe; **MPATH Diagnosis:** steatosis MPATH:622

Definitive Diagnosis:
Hepatic lipidosis

skin (MA:0000151)

Histopath Description:
Hair follicles are at arrested stage of cycle (telogen)

Morphological Diagnosis:
Severity: no lesions;

Definitive Diagnosis:
No abnormality seen

Report Summary and Recommendation:
Three mice from this line have a skin pathology mainly involving the hair follicles (M00403293, M00403292, and M00393070); the lesion is more severe in the two male mice. The lesion suggests abnormal follicular growth and differentiation, and is usually seen in endocrine alopecia and follicular dysplasia. The lesion may explain the skin phenotype observed in this line.