CMHD Pathology Report

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Mouse Portal
Europhenome

ReportID: Report Date: March 06, 2013
Pathologist: H. Adissu

CMHD LabID: N12-1515

Relevant History:
Phenotype:

abnormal snout morphology
asymmetric snout
short snout
decreased body length
decreased body weight
decreased total body fat amount
decreased body weight
abnormal radius morphology
abnormal ulna morphology
abnormal cranium morphology
abnormal tooth morphology
partial lethality

AnimalID: M00583718

Histopathology Findings:

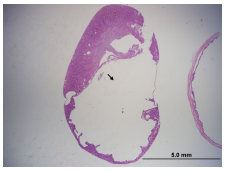
kidney (MA:0000368)

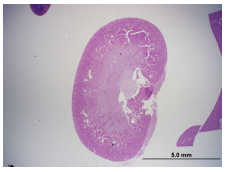
Histopath Description:
Nearly half of the renal parenchyma is replaced by a large cyst; the renal parenchyma surrounding the cyst is mildly compressed.

Morphological Diagnosis:
Duration: Chronic; **Distribution:** Unilateral; **Severity:** severe; **MPATH Diagnosis:** hydronephrosis MPATH:635

Definitive Diagnosis:
Hydronephrosis with mild parenchymal atrophy.

Histopathology Comments:
Hydronephrosis is usually caused by an ascending obstructive urinary lesion; this is not evident in the examined sections.


Kidney, hydronephrosis, 1.25x


Kidney, normal, 1.25x

liver (MA:0000358)

Histopath Description:
hepatic lipidosis is not present

Definitive Diagnosis:
No hepatic lipidosis

Histopathology Comments:

No hepatic lipidosis consistent with poor growth and weight gain

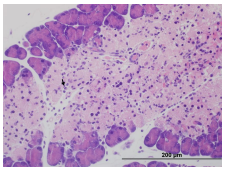
pancreas (MA:0000120)

Histopath Description:
There are multifocal areas of necrosis within multiple lobules. There are occasional polymorphonuclear cells within the necrotic parenchyma.

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

Definitive Diagnosis:
Pancreatic coagulative necrosis

Histopathology Comments:
This is uncommon lesion; the pathogenesis is not clear.



Pancreas, necrosis, 40x

skin (MA:0000151)

Histopath Description:
There are multifocal serocellular crusts overlying a focal hyperplastic epidermis. There is mild perivascular dermatitis.

Morphological Diagnosis:
Duration: Chronic; **Distribution:** Focal; **Severity:** mild; **MPATH Diagnosis:** inflammation MPATH:212

Definitive Diagnosis:
Focal serocellular exudate and epidermal hyperplasia (epidermitis)

brain (MA:0000168)

Histopath Description:
Mild hydrocephalus.

Morphological Diagnosis:
Severity: mild; **MPATH Diagnosis:** hydrocephalus MPATH:639

Definitive Diagnosis:
Mild hydrocephalus of the lateral ventricles

AnimalID: M00604074

Histopathology Findings:

liver (MA:0000358)

Histopath Description:
hepatic lipidosis is not present

Definitive Diagnosis:
No hepatic lipidosis

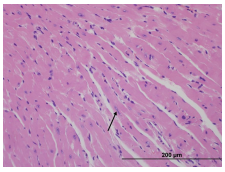
Histopathology Comments:
No hepatic lipidosis consistent with poor growth and weight gain

heart (MA:0000072)

Histopath Description:
at the base of the left ventricle, there are large myocardiocytes with gigantic vesicular nuclei (Anitschkow cells). Some of these cells have vacuolated cytoplasm. There is mild dissaray of myocardial fibers.

Morphological Diagnosis:
Distribution: multifocal; **Severity:** mild; **MPATH Diagnosis:** cardiomyopathy MPATH:615

Definitive Diagnosis:
Myocardial degeneration, mild



Left ventricle, degeneration, 40x

brain (MA:0000168)

Histopath Description:
Mild hydrocephalus.

Morphological Diagnosis:
Severity: mild; **MPATH Diagnosis:** hydrocephalus MPATH:639

Definitive Diagnosis:
Mild hydrocephalus of the lateral ventricles

AnimalID: M00583721

Histopathology Findings:

liver (MA:0000358)

Histopath Description:
hepatic lipidosis is very minimal affecting approximately 1% of heaptocytes

Definitive Diagnosis:
Minimal hepatic lipidosis

Histopathology Comments:
Minimal hepatic lipidosis is consistent with poor growth and weight gain

brain (MA:0000168)

Histopath Description:
Mild hydrocephalus.

Morphological Diagnosis:
Severity: mild; **MPATH Diagnosis:** hydrocephalus MPATH:639

Definitive Diagnosis:
Mild hydrocephalus of the lateral ventricles

AnimalID: M00583719

Histopathology Findings:

kidney (MA:0000368)

Histopath Description:
There is multifocal lymphocyte and macrophage infiltrates within the renal pelvis

Morphological Diagnosis:
Distribution: Multifocal to coalescing; **Severity:** mild;

Definitive Diagnosis:
Chronic pyelitis

liver (MA:0000358)

Histopath Description:
hepatic lipidosis is not present

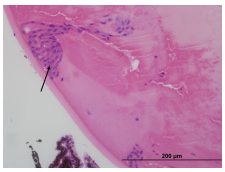
Definitive Diagnosis:
No hepatic lipidosis

Histopathology Comments:
No hepatic lipidosis consistent with poor growth and weight gain

lens (MA:0000275)

Histopath Description:
There are clusters of hypertrophic lens cells within the lens ate the anterior aspect.

Morphological Diagnosis:
MPATH Diagnosis: cataract MPATH:29



lens, cataract, note clusters of lens cells within the lens substance, 40x

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

Report Summary and Recommendation:
Absence of hepatic lipidosis in this line is consistent with decreased body weight, decreased total body fat amount, decreased body weight documented in clinical phenotyping. The significance of the pancreatic lesion in one of the mice (M00583718) is unceratin. Mild inflammation of the renal pelvis was noted in two mice (M00583718 and M00583719) ; the former had unilateral hydronephrosis. The lesion suggests unilateral obstruction proximal to the urinary bladder. Cataract was observed in one mouse (M00583719). Microscopic examination of single sections is not adequate to confirm the skeletal and facial morphodeviants.