



CMHD Pathology Report



CMHD Pathology Core

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ReportID: Report Date: November 23,
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CMHD LabID: N11-386

AnimalID: M00248859 Yipf1 hom

Histopathology Findings:

stomach (MA:0000353)

Histopath Description:

There are moderate numbers of neutrophils and a few plasma cells within the deep lamina propria and submucosa.

Morphological Diagnosis:

Duration: Chronic-active; **Distribution:** Multifocal; **Severity:** mild; **MPATH Diagnosis:** inflammation MPATH:212

Definitive Diagnosis:

Gastritis, suppurative

Histopathology Comments:

This lesion is most commonly associated with Helicobacter infection. Further investigation is suggested using histochemistry (Silver stain) or colony fecal PCR.

liver (MA:0000358)

Histopath Description:

There is multifocal lipidosis involving nearly 50% of the hepatocytes.

Morphological Diagnosis:

Distribution: Multifocal; **Severity:** moderate; **MPATH Diagnosis:** lipid deposition MPATH:42

Definitive Diagnosis:

Hepatic lipidosis

Histopathology Comments:

Hepatocellular vacuolar change of variable degree suggestive of lipidosis is present in all mice from WTS1, consistent with high lipid diet. See a representative image of diffuse hepatocellular lipidosis (Snip1 WT M00383263).

thyroid gland (MA:0000129)

Histopath Description:

Unilaterally, there are multifocal small lymphocytic aggregates within the thyroid gland interstitium.

Morphological Diagnosis:

Distribution: Unilateral; **Severity:** mild; **MPATH Diagnosis:** inflammation MPATH:212

Definitive Diagnosis:

Thyroiditis, lymphocytic, mild.

Histopathology Comments:

Thyroiditis is commonly seen in some strains of aging mice (such as B6;129); females are markedly overrepresented.

heart (MA:0000072)

Histopath Description:

Expanding the epicardium and extending into the subepicardial myocardium is a 500 um deep plaque of fibrosis and fibroplasia in which are embedded moderate numbers of neutrophils, lymphocytes, and rare macrophages. Mesothelial cells of the visceral pericardium are occasionally bilayered and are enlarged and plump (mesothelial hyperplasia and hypertrophy).

Morphological Diagnosis:

Duration: Chronic-active; **Distribution:** Focal; **Severity:** severe; **MPATH Diagnosis:** inflammation MPATH:212

Definitive Diagnosis:

Epicarditis and myocarditis, neutrophilic, with mesothelial hyperplasia.

Histopathology Comments:

The lesion was likely caused by traumatic event (see lesion in sternum).

sternum (MA:0001331)**Histopath Description:**

At the cranial sternum, the sternal bone is focally replaced by extensive fibroplasia, granulation tissue and marked perichondrial hyperplasia. There is degeneration and regeneration of the adjacent sternal muscle. Low numbers of neutrophils are present. A fold of hyperplastic mesothelium is present attached to the parietal aspect of the sternum.

Morphological Diagnosis:

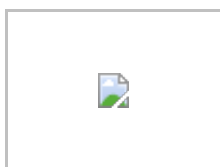
Duration: Chronic-active; **Distribution:** Focal; **Severity:** moderate; **MPATH Diagnosis:** granulation tissue MPATH:183

Definitive Diagnosis:

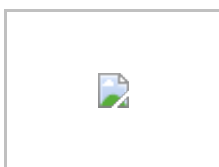
Granulation tissue, perichondrial regeneration, muscle regeneration, fibroplasia, mesothelial hyperplasia - Lesion consistent with repair of sternal fracture

Histopathology Comments:

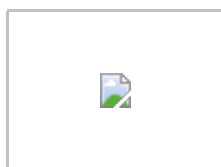
The lesion suggests sternal fracture under repair - the marked tissue proliferation and enlargement likely impinged on the epicardium causing epicarditis, fibroplasia and mesothelia hyperplasia.



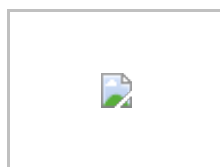
Sternum,
granulation tissue,
perichondrial
regeneration,
muscle
regeneration,
fibroplasia,
mesothelial
hyperplasia - 4x



Sternum,
granulation tissue,
perichondrial
regeneration,
muscle
regeneration,
fibroplasia,
mesothelial
hyperplasia - 10x



Heart, epicarditis,
4x



Heart, epicarditis,
40x

AnimalID: M00191921 Yipf1 hom**Histopathology Findings:****stomach (MA:0000353)****Histopath Description:**

There are moderate numbers of neutrophils and a few plasma cells within the deep lamina propria and submucosa.

Morphological Diagnosis:

Duration: Chronic-active; **Distribution:** Multifocal; **Severity:** mild; **MPATH Diagnosis:** inflammation MPATH:212

Definitive Diagnosis:

Gastritis, suppurative

Histopathology Comments:

This lesion is most commonly associated with Helicobacter infection. Further investigation is

suggested using histochemistry (Silver stain) or colony fecal PCR.

salivary gland (MA:0000346)

Histopath Description:

There is a focal interstitial aggregate of histiocytes and lymphocytes.

Morphological Diagnosis:

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

Definitive Diagnosis:

Interstitial histiocytic and lymphocytic inflammatory infiltrates

Histopathology Comments:

This is a common and insignificant incidental finding in mice.

AnimalID: M00191922 Yipf1 hom

Histopathology Findings:**stomach (MA:0000353)****Histopath Description:**

There are moderate numbers of neutrophils and a few plasma cells within the deep lamina propria and submucosa.

Morphological Diagnosis:

Duration: Chronic-active; **Distribution:** Multifocal; **Severity:** mild; **MPATH Diagnosis:** inflammation MPATH:212

Definitive Diagnosis:

Gastritis, suppurative

Histopathology Comments:

This lesion is most commonly associated with Helicobacter infection. Further investigation is suggested using histochemistry (Silver stain) or colony fecal PCR.

salivary gland (MA:0000346)

Histopath Description:

There is a focal interstitial aggregate of histiocytes and lymphocytes.

Morphological Diagnosis:

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

Definitive Diagnosis:

Interstitial histiocytic and lymphocytic inflammatory infiltrates

Histopathology Comments:

This is a common and insignificant incidental finding in mice.

eye (MA:0000261)

Histopath Description:

One of the eyes is markedly hypoplastic (micropthalmic); it is composed of a cavity lined by a thick layer of pigmented structure (undeveloped choroid) surrounded by a thick collagenous capsule.

Morphological Diagnosis:

Distribution: Unilateral; **Severity:** extreme; **MPATH Diagnosis:** developmental and structural abnormality MPATH:55

Definitive Diagnosis:

Microphtalmia, unilateral

Histopathology Comments:

Microphtalmia and other ocular defects are noted as incidental lesion in C57BL6/B6 mice.

AnimalID: M00191931 Yipf1 hom

Histopathology Findings:

liver (MA:0000358)**Histopath Description:**

There is multifocal lipidosis involving nearly 50% of the hepatocytes.

Morphological Diagnosis:

Distribution: Multifocal; **Severity:** moderate; **MPATH Diagnosis:** lipid deposition MPATH:42

Definitive Diagnosis:

Hepatic lipidosis

Histopathology Comments:

Hepatocellular vacuolar change of variable degree suggestive of lipidosis is present in all mice from WTS1, consistent with high lipid diet. See a representative image of diffuse hepatocellular lipidosis (Snip1 WT M00383263).

Report Summary and Recommendation:

Epicarditis and sternal fracture are unusual lesions but were likely of traumatic cause. Other lesions are considered incidental and/or attributable to strain background.