



CMHD Pathology Report



CMHD Pathology Core

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Mouse Genetics Project

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CMHD LabID: N11-372

AnimalID: M00312440 Pld5 hom

Tissue Preservation and Staining:

There is artefactual separation of dermis from hypodermis. The thyroid gland is not present in section.

Histopathology Findings:

stomach (MA:0000353)

Histopath Description:

There are moderate numbers of neutrophils within the lamina propria of the glandular region at the limiting ridge.

Morphological Diagnosis:

Duration: Sub-acute; **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. The presence of eosinophils suggest allergic cause.

liver (MA:0000358)

Histopath Description:

The overall hepatic lobular architecture is normal. Diffusely, hepatocytes contain intracytoplasmic clear vacuoles (lipid). The lipid vacuoles within the midzonal and periportal regions are small (2-3 um in diameter) and surround a central nucleus (interpreted as microvesicular lipid). The lipid vacuoles within the portal areas are large (8-12 um in diameter) and displace the nucleus to the margin (macrovesicular lipid). There are rare perivascular mononuclear inflammatory cells.

Morphological Diagnosis:

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

Definitive Diagnosis:

Hepatic lipodosis

Histopathology Comments:

Hepatocellular vacuolar change of variable degree suggestive of lipodosis is present in all mice from WTSI, consistent with high lipid diet.

AnimalID: M00312441 Pld5 hom

Tissue Preservation and Staining:

There is artefactual separation of dermis from hypodermis. The thyroid gland is not present in section.

Histopathology Findings:

stomach (MA:0000353)

Histopath Description:

There are moderate numbers of neutrophils within the lamina propria of the glandular region at the limiting ridge.

Morphological Diagnosis:

Duration: Sub-acute; **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. The presence of eosinophils suggest allergic cause.

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

The overall hepatic lobular architecture is normal. Diffusely, hepatocytes contain intracytoplasmic clear vacuoles (lipid). The lipid vacuoles within the midzonal and periportal regions are small (2-3 um in diameter) and surround a central nucleus (interpreted as microvesicular lipid). The lipid vacuoles within the portal areas are large (8-12 um in diameter) and displace the nucleus to the margin (macrovesicular lipid). There are rare perivascular mononuclear inflammatory cells.

Morphological Diagnosis:

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

Definitive Diagnosis:

Hepatic lipidoses

Histopathology Comments:

Hepatocellular vacuolar change of variable degree suggestive of lipidoses is present in all mice from WTSI, consistent with high lipid diet.

brown fat (MA:0000057)**Histopath Description:**

There is focally extensive hyperplasia of brown fat infiltrated with low numbers of inflammatory cells (lymphocytes, macrophages and rare neutrophils)

Morphological Diagnosis:

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

Definitive Diagnosis:

Steatitis with hyperplasia

AnimalID: M00312445 Pld5 hom**Tissue Preservation and Staining:**

There is artefactual separation of dermis from hypodermis. The thyroid gland is not present in section.

Histopathology Findings:**thymus (MA:0000142)****Histopath Description:**

Within the medulla are present 150-200 um diameter irregular cystic structures partially lined by plump squamous to cuboidal epithelium. Flocculent proteinaceous material is present within the lumina.

Morphological Diagnosis:

Distribution: Multifocal; **Severity:** mild; **MPATH Diagnosis:** developmental and structural abnormality MPATH:55

Definitive Diagnosis:

Thymic cysts

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

The overall hepatic lobular architecture is normal. Diffusely, hepatocytes contain intracytoplasmic clear vacuoles (lipid). The lipid vacuoles within the midzonal and periportal regions are small (2-3 um in diameter) and surround a central nucleus (interpreted as microvesicular lipid). The lipid vacuoles within the portal areas are large (8-12 um in diameter) and displace the nucleus to the

margin (macrovesicular lipid). There are rare perivascular mononuclear inflammatory cells.

Morphological Diagnosis:

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

Definitive Diagnosis:

Hepatic lipidosi

Histopathology Comments:

Hepatocellular vacuolar change of variable degree suggestive of lipidosi is present in all mice from WTSI, consistent with high lipid diet.

brain (MA:0000168)**Histopath Description:**

There is a mild enlargement of the lateral ventricle.

Morphological Diagnosis:

Severity: mild; **MPATH Diagnosis:** degenerative change MPATH:14

Definitive Diagnosis:

hydrocephalus, lateral ventricle

Histopathology Comments:

Variable degree of hydrocephalus is observed in a proportion of wild type C57 Black 6 mice.

lymph node (MA:0000139)**Histopath Description:**

The mesenteric lymph node is markedly enlarged. Lymphoid follicles are enlarged and there are numerous germinal centers. Numerous maturing lymphocytes and histiocytes are present within the medullary and paracortical sinuses. The marginal sinuses contain numerous mature lymphocytes.

Morphological Diagnosis:

Distribution: Diffuse; **Severity:** mild; **MPATH Diagnosis:** hyperplasia MPATH:134

Definitive Diagnosis:

Lymphoid hyperplasia with sinus histiocytosis

AnimalID: M00312446 Pld5 hom**Tissue Preservation and Staining:**

There is artefactual separation of dermis from hypodermis. The thyroid gland is not present in section.

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

There are moderate numbers of neutrophils within the lamina propria of the glandular region at the limiting ridge.

Morphological Diagnosis:

Duration: Sub-acute; **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. The presence of eosinophils suggest allergic cause.

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

The overall hepatic lobular architecture is normal. Diffusely, hepatocytes contain intracytoplasmic clear vacuoles (lipid). The lipid vacuoles within the midzonal and peri-acinar regions are small (2-3 um in diameter) and surround a central nucleus (interpreted as microvesicular lipid). The lipid vacuoles within the portal areas are large (8-12 um in diameter) and displace the nucleus to the margin (macrovesicular lipid). There are rare perivascular mononuclear inflammatory cells.

Morphological Diagnosis:

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

Definitive Diagnosis:

Hepatic lipidosi

Histopathology Comments:

Hepatocellular vacuolar change of variable degree suggestive of lipidosis is present in all mice from WTSI, consistent with high lipid diet.

brown fat (MA:0000057)**Histopath Description:**

There is focally extensive hyperplasia of brown fat infiltrated with low numbers of inflammatory cells (lymphocytes, macrophages and rare neutrophils)

Morphological Diagnosis:

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

Definitive Diagnosis:

Steatitis with hyperplasia

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

The overall hepatic lobular architecture is normal. Approximately 50% of hepatocytes within the midzonal region contain large (8-12 um in diameter) intracytoplasmic clear vacuoles (macrovesicular lipid).

Morphological Diagnosis:

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

Definitive Diagnosis:

Hepatic lipidosis.

Report Summary and Recommendation:

Incidental lesions attributable to diet or strain background are observed in this line.