



CMHD Pathology Report



CMHD Pathology Core

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Mouse Genetics Project

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CMHD LabID: N11-201

AnimalID: M00213551 Plbd1 hom

Histopathology Findings:

liver (MA:0000358)

Histopath Description:

The overall hepatic lobular architecture is normal. Approximately 30% of hepatocytes within the midzonal region contain large (8-12 um in diameter) intracytoplasmic clear vacuoles (macrovesicular lipid). There are rare foci of neutrophilic clusters with rare nuclear fragments.

Morphological Diagnosis:

Distribution: Multifocal; **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.

stomach (MA:0000353)

Histopath Description:

There are low numbers of neutrophils and moderate numbers of eosinophils 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.

Organ/Tissue Analyzed:

There were no significant findings in the following tissues: Brain, eyes, salivary glands, nasal sinuses, teeth, trachea, lungs, heart, thymus, thyroid gland, parathyroid gland, spleen, gall bladder, exocrine and endocrine pancreas, esophagus, intestines, urinary organs and tract, adrenal gland, reproductive organs, lymph nodes, spinal cord, bones, bone marrow, skeletal muscles, brown fat, and skin.

AnimalID: M00213550 Plbd1 hom

Histopathology Findings:

lymph node (MA:0000139)

Histopath Description:

The lymph node architecture is altered by the presence of large numbers of monomorphic lymphocytes filling and distending all the sinuses and elevating the capsule. The neoplastic cells have generally a scant amount of eosinophilic cytoplasm, medium sized round central nucleus with granular chromatin and single variably distinct amphophilic nucleoli. Mitotic figures are less than 1/HPF.

Morphological Diagnosis:

Distribution: Multifocal; **MPATH Diagnosis:** lymphoma [obsolete use MPATH:516 or 535]
MPATH:343

Definitive Diagnosis:

Lymphoma

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

There is diffuse hepatic lipidosis.

Morphological Diagnosis:

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

Definitive Diagnosis:

Hepatic liposis

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

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

Morphological Diagnosis:

Duration: Sub-acute; **Distribution:** Multifocal; **Severity:** moderate; **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.

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

There is a mild enlargement of the lateral ventricle.

Morphological Diagnosis:

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

Definitive Diagnosis:

hydrocephalus, lateral ventricle

Histopathology Comments:

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

Organ/Tissue Analyzed:

There were no significant findings in the following tissues: eyes, salivary glands, nasal sinuses, teeth, trachea, lungs, heart, thymus, thyroid gland, parathyroid gland, spleen, gall bladder, exocrine and endocrine pancreas, esophagus, intestines, urinary organs and tract, adrenal gland, reproductive organs, spinal cord, bones, bone marrow, skeletal muscles, brown fat, and skin.

AnimalID: M00213549 Plbd1 hom**Tissue Preservation and Staining:**

There is artifactual separation of the dermis and hypodermis

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

The lymph node architecture is altered by the presence of large numbers of monomorphic lymphocytes filling and distending all the sinuses and elevating the capsule. The neoplastic cells have generally a scant amount of eosinophilic cytoplasm, medium sized round central nucleus with granular chromatin and single variably distinct amphophilic nucleoli. Mitotic figures are less than 1/HPF.

Morphological Diagnosis:

Distribution: Multifocal; **MPATH Diagnosis:** lymphoma [obsolete use MPATH:516 or 535]
MPATH:343

Definitive Diagnosis:

Lymphoma

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

There is diffuse hepatic lipidosis.

Morphological Diagnosis:

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

Definitive Diagnosis:

Hepatic lipiosis

Organ/Tissue Analyzed:

There were no significant findings in the following tissues: brain, eyes, salivary glands, nasal sinuses, teeth, trachea, lungs, heart, thymus, thyroid gland, parathyroid gland, spleen, gall bladder, exocrine and endocrine pancreas, esophagus, stomach, intestines, urinary organs and tract, adrenal gland, reproductive organs, spinal cord, bones, bone marrow, skeletal muscles, brown fat, and skin.

AnimalID: M00213543 Plbd1 hom**Tissue Preservation and Staining:**

There is artifactual separation of dermis from hypodermis

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

The mesenteric lymph node is enlarged and follicles are prominent. Subcapsular sinuses contain large numbers of mature lymphocytes. There are low numbers of neutrophils within the medullary stroma.

Morphological Diagnosis:

Duration: Sub-acute; **Distribution:** Diffuse; **Severity:** mild; **MPATH Diagnosis:** hyperplasia
MPATH:134

Definitive Diagnosis:

Lymphoid hyperplasia.

Histopathology Comments:

The changes in the mesenteric lymph node are suggestive of draining of a regional inflammatory process. However, such a process was not observed in the tissues examined.

adrenal gland (MA:0000116)**Histopath Description:**

Adrenal cortical cells immediately surrounding the medulla are vacuolated and contain fine granular golden brown cytoplasmic pigment. Rare mononuclear cells are present within this zone.

Morphological Diagnosis:

Distribution: Diffuse; **Severity:** no lesions; **MPATH Diagnosis:** degenerative change MPATH:14

Definitive Diagnosis:

Vacuolar degeneration of X-zone of the adrenal gland with cytoplasmic ceroid accumulation (X-zone involution).

Histopathology Comments:

The X zone of the adrenal cortex disappears when males reach sexual maturity and females undergo their first pregnancy. The zone also disappears in virgin females, albeit gradually (Percy and Barthold, 2007).

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

The overall hepatic lobular architecture is normal. Approximately 30% of hepatocytes within the midzonal region contain large (8-12 µm in diameter) intracytoplasmic clear vacuoles (macrovesicular lipid). There are rare foci of neutrophilic clusters with rare nuclear fragments.

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 WTSI, consistent with high lipid diet.

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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.

Organ/Tissue Analyzed:

There were no significant findings in the following tissues: Calvarium, brain, eyes, ears, tongue, Harderian gland, zymbal gland, salivary glands, nasal sinuses, teeth, trachea, lungs, heart, thymus, thyroid gland, parathyroid gland, spleen, gall bladder, exocrine and endocrine pancreas, esophagus, intestines, urinary organs and tract, adrenal gland, reproductive organs, lymph nodes, spinal cord, bones, bone marrow, skeletal muscles, brown fat, and skin.

Report Summary and Recommendation:

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