



CMHD Pathology Report



CMHD Pathology Core

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ReportID: Report Date: November 23,
2011
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Mouse Genetics Project

Wellcome Trust Sanger
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Wellcome Trust Genome
Campus
Hinxton, Cambridge
CB10 1SA
UK

CMHD LabID: N11-376

AnimalID: M00301765 Sirt2 hom

Histopathology Findings:

liver (MA:0000358)

Histopath Description:

lipid accumulation similar to M0018944 Adam 17 Het

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. See a representative image of diffuse hepatocellular lipodosis (Snip1 WT M00383263).

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.

brain (MA:0000168)

Histopath Description:

There is a mild enlargement of the third ventricle.

Morphological Diagnosis:

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

Definitive Diagnosis:

hydrocephalus, third 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 enlarged more than two-fold. Its architecture is altered by large numbers of monomorphic lymphocytes that fill and distend all the sinuses and elevate 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:

MPATH Diagnosis: lymphoma [obsolete use MPATH:516 or 535] MPATH:343

Definitive Diagnosis:

Lymphoma

Histopathology Comments:

The lesion is suggestive of an early lymphoma of the mesenteric lymph node.

AnimalID: M00301766 Sirt2 hom

AnimalID: M00205241 Sirt2 hom**Histopathology Findings:****liver (MA:0000358)****Histopath Description:**

lipid accumulation similar to M0018944 Adam 17 Het

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. See a representative image of diffuse hepatocellular lipidosi (Snip1 WT M00383263).

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.

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

The mesenteric lymph node is enlarged (nearly 3x normal). There is a diffuse and marked increase in the paracortical and medullary areas and cellularity; these cells are organized as prominent chords, and they are larger and blast-like. Lymphoid follicles are increased in size and some have germinal centers.

Morphological Diagnosis:

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

Definitive Diagnosis:

Lymphoid hyperplasia

AnimalID: M00205251 Sirt2 hom

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, liver, gall bladder, exocrine and endocrine pancreas, esophagus, stomach, 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:

Hyperplastic and early neoplastic changes are present within the mesenteric lymph nodes in this line. It should be noted that mesenteric lymph nodes can be dramatically variable within an animal and between animals due to the constant exposure of various antigenic substances in the intestinal lumen. For this reason, comparison of nodes between the mutant lines and a cohort wild type control is required to identify genotype effect. Note the following wild type mice have early lymphoma of at least a single lymph node, mainly those of the mesenteric and pancreatic lymph nodes (M00438199 Psmb2 WT; M00451965 Trrap WT; M00387957 Btbd12 WT; M00558161 Gap43 WT; and M00405977 Snip1 WT).

Hyperplastic and early neoplastic changes are present within lymph nodes in this line.

Lymph node: precursor b cell neoplasms MPATH:517