



**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:**

NSF will be appended

**AnimalID: M00393053 Stard13 hom**

**Tissue Preservation and Staining:**

There is artifactual separation of the dermis and hypodermis. The thyroid gland is not present in section. Tissues not present in submission: Calvarium, ears, tongue, Harderian gland, zymbal gland, nasal sinuses, teeth, gall bladder.

**Histopathology Findings:**

**lymph node (MA:0000139)**

**Histopath Description:**

The mesenteric lymph node is enlarged (greater than three-fold). There are multiple follicles with large germinal centers. The sinuses contain large numbers of mature lymphocytes.

**Morphological Diagnosis:**

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

**liver (MA:0000358)**

**Histopath Description:**

The overall hepatic lobular architecture is normal. Nearly 50% of hepatocytes notably within the midzonal region contain large (8-12 um in diameter) intracytoplasmic clear vacuoles (macrovesicular lipid). Rare small clusters of lymphocytes are present.

**Morphological Diagnosis:**

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

**Definitive Diagnosis:**

Hepatic lipidoses; multifocal inflammatory foci

**Histopathology Comments:**

Hepatocellular vacuolar change of variable degree suggestive of lipidoses is present in all mice from WTSI, consistent with high lipid diet. The changes in this mouse are less severe.

**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.

**stomach (MA:0000353)**

**Histopath Description:**

Multifocally, glandular epithelial cells contain abundant hyalinized eosinophilic proteinaceous material.

**Morphological Diagnosis:**

**Distribution:** Multifocal; **Severity:** mild; **MPATH Diagnosis:** protein deposition MPATH:45

**Definitive Diagnosis:**

Gastric epithelial proteinosis

**eye (MA:0000261)****Histopath Description:**

There is a focally extensive folding of the retina at the posterior margin; the ganglion layer in this folded focus is adhered to the pigmented retinal epithelium.

**Morphological Diagnosis:**

**Distribution:** Focal; **MPATH Diagnosis:** developmental and structural abnormality MPATH:55

**Definitive Diagnosis:**

Focal retinal fold

**Organ/Tissue Analyzed:**

NSF will be appended

**AnimalID: M00393048 Stard13 hom****Tissue Preservation and Staining:**

There is artifactual separation of the dermis and hypodermis. The thyroid gland is not present in section. Tissues not present in submission: Calvarium, ears, tongue, Harderian gland, zymbal gland, nasal sinuses, teeth, gall bladder.

**Histopathology Findings:****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 periacinar 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 lipidosis

**Histopathology Comments:**

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

**Organ/Tissue Analyzed:**

NSF will be appended

**AnimalID: M00393049 Stard13 hom****Tissue Preservation and Staining:**

There is artifactual separation of the dermis and hypodermis. The thyroid gland is not present in section. Tissues not present in submission: Calvarium, ears, tongue, Harderian gland, zymbal gland, nasal sinuses, teeth, gall bladder.

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

The mesenteric lymph node is enlarged (greater than two-fold). There are multiple follicles with large germinal centers. The sinuses contain large numbers of mature lymphocytes.

**Morphological Diagnosis:**

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

**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 lipidosis

**Histopathology Comments:**

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

**Organ/Tissue Analyzed:**

NSF will be appended

**Summary:**

Hyperplasia of mesenteric lymph nodes is present in 3 of the four mice in this line. Bone marrow will be reviewed separately and results will be appended.

**Report Summary and Recommendation:**

Lymph node hyperplasia was observed in 3 of 4 mice in this line. Although this lesion is not specific to this line, it may suggest a chronic antigenic stimulation or infection. We speculate a chronic disease or antigenic stimulation may have caused the decrease in hemoglobin and hematocrit observed during in-life phenotyping.

Lymph node: hyperplasia MPATH:134