

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:

NSF will be appended

AnimalID: M00176483 Necab2 hom**Tissue Preservation and Staining:**

Tissues not present in submission: Calvarium, ears, tongue, Harderian gland, zymbal gland, nasal sinuses, teeth, gall bladder.

Histopathology Findings:**gall bladder (MA:0000356)****Histopath Description:**

There are moderate numbers of neutrophils within the submucosa of main bile duct and the gall bladder.

Morphological Diagnosis:

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

Definitive Diagnosis:

Suppurative cholangitis and cholecystitis

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.

Histopathology Comments:

Hepatocellular vacuolar change of variable degree suggestive of lipidosis is present in all mice from WTS1, consistent with high lipid diet.

ear (MA:0000236)**Histopath Description:**

There is a focally extensive epidermal hyperplasia with prominent basket-weave orthokeratotic hyperkeratosis.

Morphological Diagnosis:

Distribution: Focal; **Severity:** moderate; **MPATH Diagnosis:** hyperplasia MPATH:134

Definitive Diagnosis:

Focally extensive acanthosis with hyperkeratosis

Organ/Tissue Analyzed:

NSF will be appended

AnimalID: M00176476 Necab2 hom**Tissue Preservation and Staining:**

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. Approximately 20% 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 lipidosi.

Histopathology Comments:

Hepatocellular vacuolar change of variable degree suggestive of lipidosi is present in all mice from WTS1, 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:** 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.

testis (MA:0000411)**Histopath Description:**

There are occasional large spermatids (30-50 um in diameter) that have a large basophilic amorphous nucleus.

Morphological Diagnosis:

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

Definitive Diagnosis:

Spermatocyte swelling

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

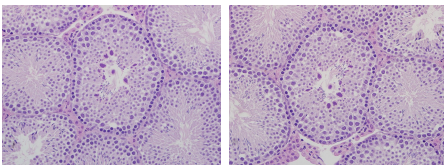
The lymph node architecture is altered by the presence of large numbers of monomorphic lymphocytes filling and distending the paracortical and subcapsular sinuses and elevate the capsule. The neoplastic cells have generally a scant amount of eosinophilic cytoplasm, medium sized round central nucleus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

Morphological Diagnosis:

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

Definitive Diagnosis:

Lymphoma



Testis, spermatid gigantism, 40x

Testis, spermatid gigantism, 40x

Organ/Tissue Analyzed:

NSF will be appended

AnimalID: M00202729 Necab2 hom**Tissue Preservation and Staining:**

There is separation of dermis and hypodermis. 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. Approximately 30% of hepatocytes within the midzonal region contain large (8-12 um in diameter) intracytoplasmic clear vacuoles (macrovesicular lipid). There are occasional aggregates of lymphocytes and neutrophils within the parenchyma.

Morphological Diagnosis:

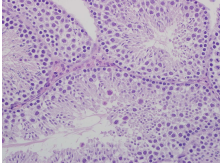
Distribution: Multifocal; **Severity:** moderate; **MPATH Diagnosis:** lipid deposition MPATH:42

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.



Testis, spermatic gigantism, 40x

Organ/Tissue Analyzed:

NSF will be appended

Summary:

Mild degenerative change characterized by swelling or gigantism of occasional spermatids is present. The significance of this change in the face of a robust spermatogenesis is not certain. Swollen spermatids, together with multinucleated spermatids, have been reported as spontaneous lesions in young beagle dogs. Other lesions seen in this line are considered incidental or attributable to diet (hepatic lipidosis) and strain background (hydrocephalus).

Report Summary and Recommendation:

Mild degenerative change characterized by swelling or gigantism of occasional spermatids is present. The significance of this change in the face of a robust spermatogenesis is not certain. Swollen spermatids, together with multinucleated spermatids, have been reported as spontaneous lesions in young beagle dogs. Other lesions seen in this line are considered incidental or attributable to diet (hepatic lipidosis) and strain background (hydrocephalus).

Seminiferous tubule - Spermatic: hypertrophy MPATH:159

References:

Michael J et al. (2008). Spontaneous and Age-Related Testicular Findings in Beagle Dogs. Toxicol Pathol 2008 36: 465