

CMHD Pathology Report



CMHD Pathology Core

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Mouse Genetics Project

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

ReportID: Report Date: March 12, 2013

Pathologist: H. Adissu

CMHD LabID: N12-1510

Relevant History:

Phenotypes:

decreased CD8-positive T cell number decreased NK T cell number decreased NK cell number integument phenotype increased susceptibility to infection induced morbidity/mortality increased susceptibility to bacterial infection induced morbidity/mortality

AnimalID: M00184978 (Male) Histopathology Findings:

liver (MA:0000358)

Histopath Description:

Multifocal macrovesicular lipid deposition in hepatocytes

Morphological Diagnosis:

Distribution: multifocal; Severity: moderate; MPATH Diagnosis: steatosis MPATH:622

Definitive Diagnosis: Moderate hepatic steatosis

stomach (MA:0000353)

Histopath Description:

Moderate neutrophilic gastritis.

Morphological Diagnosis:

Distribution: multifocal to coalescing; **Severity:** moderate; **MPATH Diagnosis:** inflammation

MPATH:212

Definitive Diagnosis:

Neutrophilic gastritis

AnimalID: M00184982 (Male) Histopathology Findings: liver (MA:0000358)

Morphological Diagnosis:

Distribution: diffuse; Severity: severe; MPATH Diagnosis: steatosis MPATH:622

Definitive Diagnosis: Hepatic lipidosis, severe

adrenal gland (MA:0000116)

Histopath Description:

There is a small, well-circumscribed mass in the cortex. It is encapsulated by a thin layer of pale eosinophlic material and fusiform cells (connective tissue with fibroblasts) and is made of nests of polygonal cells interspersed by a very thin fibrovascular membrane. The architecture is reminisecent of the zona glomerulosa and zona fasciculate of the mature adrenal gland.

Morphological Diagnosis:

Distribution: focal; **MPATH Diagnosis:** choristoma MPATH:477

Definitive Diagnosis:

accessory adrenal cortical tissue

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;

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.

AnimalID: M00184987 (Female)

Histopathology Findings:

liver (MA:0000358)

Histopath Description:

Multifocal macrovesicular lipid deposition in hepatocytes

Morphological Diagnosis:

Distribution: multifocal; Severity: moderate; MPATH Diagnosis: steatosis MPATH:622

Definitive Diagnosis:

Moderate hepatic steatosis

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.

AnimalID: M00184984 (Female)

Histopathology Findings:

liver (MA:0000358)

Morphological Diagnosis:

Distribution: diffuse; Severity: severe; MPATH Diagnosis: steatosis MPATH:622

Definitive Diagnosis:

Hepatic lipidosis, severe

thymus (MA:0000142)

Histopath Description:

There is a 100 um diamater epithelial cyst.

Morphological Diagnosis:

Distribution: focal; **MPATH Diagnosis:** cyst MPATH:62

Definitive Diagnosis:

Epithelial cyst

brain (MA:0000168)

Histopath Description:

Mild hydrocephalus.

Morphological Diagnosis:

MPATH Diagnosis: hydrocephalus MPATH:639

Definitive Diagnosis:

Mild hydrocephalus of the lateral ventricles

spleen (MA:0000141)

Histopath Description:

marked erythroid hyperplasia. Lymphoid follicles are enlarged with many of them having germinal centres.

Morphological Diagnosis:

Severity: moderate; MPATH Diagnosis: extramedullary hemopoiesis MPATH:595

Definitive Diagnosis:

extramedullary erythroid hyperplasia; lymphoid hyperplasia

bone marrow (MA:0000134)

Histopath Description:

Marrow cellularity is estimated at 80-90%. Erythroid cells are markedly increased with myeloid to erythroid ratio ranging from 2:1 to 3:1 (normal ME ratio is 4:1 to 6:1 in controls). Megakaryocytes are present within normal limits. All cell lineages appear to have synchronous maturation.

Morphological Diagnosis:

Distribution: generalized; Severity: mild; MPATH Diagnosis: hyperplasia MPATH:134

Definitive Diagnosis:

Erythroid hyperplasia

Report Summary and Recommendation:

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