



CMHD Pathology Report



CMHD Pathology Core

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ReportID: Report Date: May 09, 2013
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Mouse Genetics Project

Wellcome Trust Sanger
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Hinxton, Cambridge
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CMHD LabID: N13-236

Relevant History:

Phenotype:

preweaning lethality
preweaning lethality
decreased length of long bones
increased trabecular bone thickness

AnimalID: M00261983 (Female)

Histopathology Findings:

liver (MA:0000358)

Histopath Description:

moderate lipidosis

Morphological Diagnosis:

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

Definitive Diagnosis:

Hepatic lipidosis

lung (MA:0000415)

Histopath Description:

There are rare small perivascular aggregates of mononuclear inflammatory cells in the lung.

Morphological Diagnosis:

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

Definitive Diagnosis:

Perivascular inflammatory aggregates

Histopathology Comments:

This lesion is suggestive of antigenic stimulation of hematogenous origin. It is a common and insignificant incidental finding.

Organ/Tissue Analyzed:

Histopathology examination included the following organs and tissues: brain, trigeminal ganglion, eyes, salivary glands, trachea, lungs, heart, thymus, thyroid gland, parathyroid gland, exocrine and endocrine pancreas, oesophagus, stomach, small intestine, large intestine, liver, gall bladder, spleen, kidneys, adrenal gland, lymph nodes, spinal cord, bone marrow, sternum, femur and tibia with associated skeletal muscles, brown fat, pinna, skin, uterus, oviduct, and ovary, and mammary gland.

AnimalID: M00261984 (Female)

Histopathology Findings:

liver (MA:0000358)

Histopath Description:

moderate lipidosis

Morphological Diagnosis:

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

Definitive Diagnosis:

Hepatic lipidosis

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

The lymph node contains moderately prominent lymphoid nodules with prominent germinal centers. Occasional apoptotic bodies are present within germinal center freely or within the cytoplasm of macrophages. There are numerous mature lymphocytes within medullary sinuses.

Morphological Diagnosis:

Distribution: multifocal; **Severity:** mild; **MPATH Diagnosis:** lymphoid hyperplasia MPATH:147

Definitive Diagnosis:

Lymphoid hyperplasia with sinus plasmacytosis

spleen (MA:0000141)**Histopath Description:**

mild erythroid hyperplasia

Morphological Diagnosis:

Distribution: multifocal; **Severity:** mild; **MPATH Diagnosis:** extramedullary hemopoiesis MPATH:595

Definitive Diagnosis:

Splenic erythroid hyperplasia

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

moderate neutrophilic gastritis

Morphological Diagnosis:

Distribution: multifocal to coalescing; **Severity:** moderate;

Definitive Diagnosis:

Gastritis, neutrophilic

Organ/Tissue Analyzed:

Histopathology examination included the following organs and tissues: brain, trigeminal ganglion, eyes, salivary glands, trachea, lungs, heart, thymus, thyroid gland, parathyroid gland, exocrine and endocrine pancreas, oesophagus, stomach, small intestine, large intestine, liver, gall bladder, spleen, kidneys, adrenal gland, lymph nodes, spinal cord, bone marrow, sternum, femur and tibia with associated skeletal muscles, brown fat, pinna, skin, uterus, oviduct, and ovary, and mammary gland.

AnimalID: M00309393 (Male)**Tissue Preservation and Staining:**

Skin is poorly preserved and processed

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

The hepatocytes diffusely contain excessive glycogen accumulation in the cytoplasm.

Morphological Diagnosis:

Distribution: diffuse; **Severity:** moderate; **MPATH Diagnosis:** steatosis MPATH:622

Definitive Diagnosis:

diffuse hepatic lipidosis

Histopathology Comments:

Hepatic lipidosis and glycogenosis are due to high-fat diet.

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

The lymph node contains moderately prominent lymphoid nodules with prominent germinal centers.

Occasional apoptotic bodies are present within germinal center freely or within the cytoplasm of macrophages. There are numerous mature lymphocytes within medullary sinuses.

Morphological Diagnosis:

Distribution: multifocal; **Severity:** mild; **MPATH Diagnosis:** lymphoid hyperplasia MPATH:147

Definitive Diagnosis:

Lymphoid hyperplasia with sinus plasmacytosis

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

moderate neutrophilic gastritis

Morphological Diagnosis:

Distribution: multifocal to coalescing; **Severity:** moderate;

Definitive Diagnosis:

Gastritis, neutrophilic

sternal manubrium (MA:0001332)**Histopath Description:**

There is a partial sternal fracture. The chondroid tissue along the fracture is markedly degenerate. There is a nodular cartilagenous proliferation at the perichondrial margins (reactive reparative chondroid hyperplasia)

Morphological Diagnosis:

Duration: chronic; **Distribution:** focally extensive;

Definitive Diagnosis:

Sternal osteochondritis with fracture and reactive and reparative chondroid hyperplasia ('calus')

Organ/Tissue Analyzed:

Histopathology examination included the following organs and tissues: brain, trigeminal ganglion, eyes, salivary glands, trachea, lungs, heart, thymus, thyroid gland, parathyroid gland, exocrine and endocrine pancreas, oesophagus, stomach, small intestine, large intestine, liver, gall bladder, spleen, kidneys, adrenal gland, lymph nodes, spinal cord, bone marrow, sternum, femur and tibia with associated skeletal muscles, brown fat, pinna, skin, testis, epididymis, seminal vesicle, and prostate.

AnimalID: M00309394 (Male)**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 and plasma cells

Morphological Diagnosis:

Duration: Sub-acute; **Distribution:** Diffuse; **Severity:** moderate; **MPATH Diagnosis:** lymphoid hyperplasia MPATH:147

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 hepatocytes diffusely contain excessive glycogen accumulation in the cytoplasm.

Morphological Diagnosis:

Distribution: diffuse; **Severity:** moderate; **MPATH Diagnosis:** steatosis MPATH:622

Definitive Diagnosis:

diffuse hepatic lipidosis

Histopathology Comments:

Hepatic lipidosis and glycogenosis are due to high-fat diet.

Organ/Tissue Analyzed:

Histopathology examination included the following organs and tissues: brain, trigeminal ganglion, eyes, salivary glands, trachea, lungs, heart, thymus, thyroid gland, parathyroid gland, exocrine and endocrine pancreas, oesophagus, stomach, small intestine, large intestine, liver, gall bladder, spleen, kidneys, adrenal gland, lymph nodes, spinal cord, bone marrow, sternum, femur and tibia with associated skeletal muscles, brown fat, pinna, skin, testis, epididymis, seminal vesicle, and prostate.

Report Summary and Recommendation:

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