



CMHD Pathology Report



CMHD Pathology Core

Toronto Centre for
Phenogenomics
25 Orde St. 3rd fl.
Toronto, Ont. M5T 3H7
Tel.(416) 586-8375
Fax (416) 586-5993

contact: Dr. Susan
Newbigging
email:
newbigging@lunenfeld.ca

ReportID: Report Date: January 08, 2014
Pathologist: Dr. H. Adissu

Mouse Genetics Project

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

CMHD LabID: N13-710

Relevant History:

decreased circulating triglyceride level
decreased circulating cholesterol level
increased susceptibility to bacterial infection

AnimalID: M01058784 (Male)

Histopathology Findings:

eye (MA:0000261)

Histopath Description:

Involving one eye, there are clusters of external nuclear structures within the internal plexiform layer.

Morphological Diagnosis:

Distribution: multifocal; **Severity:** mild; **MPATH Process Term:** developmental dysplasia
MPATH:64

Definitive Diagnosis:

Retinal dysplasia

thymus (MA:0000142)

Histopath Description:

There are two 50 um diameter epithelial cysts.

Morphological Diagnosis:

Distribution: multifocal; **MPATH Diagnosis:** cyst MPATH:62; **MPATH Process Term:**
developmental and structural abnormality MPATH:55

Definitive Diagnosis:

Epithelial cyst

Histopathology Comments:

This is a developmental abnormality commonly seen in mice.

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: M01120616 (Male)

Histopathology Findings:

liver (MA:0000358)

Histopath Description:

There is a focal aggregates of inflammatory cells centered on necrotic and regenerative hepatocytes

Morphological Diagnosis:

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

Definitive Diagnosis:

Inflammatory cell aggregates

Histopathology Comments:

This is a common finding in lab mice and is attributed to inflammation from bacterial showering from the portal circulation.

lung (MA:0000415)**Histopath Description:**

There are occasional perivascular lymphoid aggregates

Morphological Diagnosis:

Distribution: multifocal; **Severity:** mild; **MPATH Process Term:** inflammation MPATH:212

Definitive Diagnosis:

Perivascular lymphoid aggregates

Histopathology Comments:

The lesion suggests antigenic stimulation of hematogenous origin

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: M01145367 (Female)**Histopathology Findings:****lung (MA:0000415)****Histopath Description:**

There are occasional perivascular lymphoid aggregates

Morphological Diagnosis:

Distribution: multifocal; **Severity:** mild; **MPATH Process Term:** inflammation MPATH:212

Definitive Diagnosis:

Perivascular lymphoid aggregates

Histopathology Comments:

The lesion suggests antigenic stimulation of hematogenous origin

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

Involving one eye, there are clusters of external nuclear structures within the internal plexiform layer.

Morphological Diagnosis:

Distribution: multifocal; **Severity:** mild; **MPATH Process Term:** developmental dysplasia MPATH:64

Definitive Diagnosis:

Retinal dysplasia

lung (MA:0000415)**Histopath Description:**

There is a focal perivascular aggregates of mononuclear inflammatory cells in the lung.

Morphological Diagnosis:

Duration: Chronic; **Distribution:** focal; **Severity:** mild; **MPATH Diagnosis:** inflammation MPATH:212; **MPATH Process Term:** 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.

thymus (MA:0000142)**Histopath Description:**

There are two 50 um diameter epithelial cysts.

Morphological Diagnosis:

Distribution: multifocal; **MPATH Diagnosis:** cyst MPATH:62; **MPATH Process Term:** developmental and structural abnormality MPATH:55

Definitive Diagnosis:

Epithelial cyst

Histopathology Comments:

This is a developmental abnormality commonly seen in mice.

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

The mesenteric lymph node is markedly enlarged (greater than four fold). The medulla is particularly expanded by chords and sheets of plasmotoid cells. There are prominent germinal centers within the medulla

Morphological Diagnosis:

Distribution: Diffuse; **Severity:** moderate; **MPATH Diagnosis:** hyperplasia MPATH:134; **MPATH Process Term:** 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. Early marginal center lymphoma is suspected.

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: M01054072 (Female)**Histopathology Findings:****lymph node (MA:0000139)****Histopath Description:**

The mesenteric lymph node is markedly enlarged (greater than four fold). The medulla is particularly expanded by chords and sheets of plasmotoid cells. There are prominent germinal centers within the medulla

Morphological Diagnosis:

Distribution: Diffuse; **Severity:** moderate; **MPATH Diagnosis:** hyperplasia MPATH:134; **MPATH Process Term:** 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. Early marginal center lymphoma is suspected.

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.

Report Summary and Recommendation:

Incidental lesions attributable to diet or strain background are observed in this line. We did not find morphological correlates to decreased circulating triglyceride level, decreased circulating cholesterol level, and increased susceptibility to bacterial infection.

Line summary: None