



CMHD Pathology Report



CMHD Pathology Core

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ReportID: Report Date: September 24,
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Pathologist: Dr. H. Adissu

Mouse Genetics Project

Wellcome Trust Sanger
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Hinxton, Cambridge
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CMHD LabID: N13-576

Relevant History:

Phenotype:

Increased susceptibility to bacterial infection

AnimalID: M00742760 (Male)

Histopathology Findings:

lung (MA:0000415)

Histopath Description:

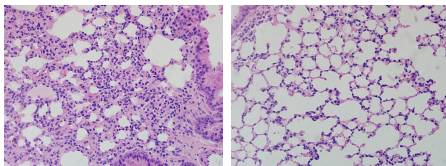
The interstitium is expanded upto 2-3 X with moderate number of monocytes and granulocytes.

Morphological Diagnosis:

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

Definitive Diagnosis:

Interstitial pneumonia



Lung, interstitial pneumonia, 40x, HE Lung, normal, 40x, HE

liver (MA:0000358)

Histopath Description:

diffuse lipidosis

Morphological Diagnosis:

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

Definitive Diagnosis:

hepatic steatosis

eye (MA:0000261)

Histopath Description:

there is a focal retinal fold at the posterior aspect

Morphological Diagnosis:

Distribution: focal; **Severity:** mild;

Definitive Diagnosis:

Focal retinal fold

Histopathology Comments:

This lesion is incidentally seen in this strain.

kidney (MA:0000368)**Histopath Description:**

Focal tubular hyperplasia

Morphological Diagnosis:**Distribution:** focally extensive; **Severity:** mild;**Definitive Diagnosis:**

Focal tubular hyperplasia

Histopathology Comments:

This is considered incidental lesion likely a post necrosis reparative regenerative proliferation.

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**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 maginal center lymphoma is suspected.

Organ/Tissue Analyzed:

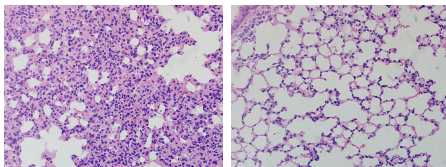
Histopathology examination included the following organs and tissues: brain, trigeminal ganglion, eyes, salivary glands, trachea, lungs, heart, thymus, thyroid gland, parathyroid gland, exocrine and endocrine pancreas, oesophagus, stomach, small intestine, large intestine, liver, gall bladder, spleen,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

AnimalID: M00742763 (Male)**Histopathology Findings:****lung (MA:0000415)****Histopath Description:**

The interstitium is expanded upto 2-3 X with moderate number of monocytes and granulocytes.

Morphological Diagnosis:**Distribution:** multifocal to coalescing; **Severity:** moderate;**Definitive Diagnosis:**

Interstitial pneumonia



Lung, interstitial pneumonia, 40x, HE Lung, normal, 40x, HE

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**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 maginal center lymphoma is suspected.

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

diffuse lipidosis

Morphological Diagnosis:**Distribution:** diffuse; **Severity:** extreme; **MPATH Diagnosis:** steatosis MPATH:622**Definitive Diagnosis:**

hepatic steatosis

brain (MA:0000168)**Histopath Description:**

There is mild dilation of the lateral ventricles

Morphological Diagnosis:**Distribution:** bilateral; **Severity:** mild;**Definitive Diagnosis:**

Dilation of the brain ventricles

Histopathology Comments:

Mild dilation of the lateral ventricles is a background condition in mice of C57BL/6N background (Brayton et al., 2004).

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: M00779501 (Female)**Histopathology Findings:****liver (MA:0000358)****Histopath Description:**

diffuse lipidosis

Morphological Diagnosis:**Distribution:** diffuse; **Severity:** extreme; **MPATH Diagnosis:** steatosis MPATH:622**Definitive Diagnosis:**

hepatic steatosis

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: M00779500 (Female)**Histopathology Findings:****liver (MA:0000358)****Histopath Description:**

diffuse lipidosis

Morphological Diagnosis:**Distribution:** diffuse; **Severity:** extreme; **MPATH Diagnosis:** steatosis MPATH:622**Definitive Diagnosis:**

hepatic steatosis

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

mild erythropoiesis

Morphological Diagnosis:

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

Definitive Diagnosis:

Mild erythropoiesis

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

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 maginal 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:

Interstitial pneumonia is observed in two males. Interstitial pneumonia is rarely seen in specific pathogen free colonies. The lesion may have significance in relation to increased increased susceptibility to bacterial infection in this line. There are no lesions in the hemolymphatic tissues (bone marrow, lymph nodes, and thymus) to corroborate increased susceptibility to bacterial infection.

Summary:

Lung: Interstitial pneumonia (2/4, both males)

Mesenteric lymph node: Lymphoid hyperplasia (3/4)