



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

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Pathologist: Dr. H. Adissu

Mouse Genetics Project

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

CMHD LabID: N13-713

Relevant History:

Phenotype: None

AnimalID: M01061484 (Male)

Histopathology Findings:

eye (MA:0000261)

Histopath Description:

A 100 stalk of fibrous connective tissue containing a small artery in the center extends from the area of the optic disc towards the posterior vitreous. A small fragment of fibrous tissue is freely present within the vitreous anterior to this stalk (assumed to be extension of the stalk).

Morphological Diagnosis:

MPATH Diagnosis: developmental and structural abnormality MPATH:55; **MPATH Process Term:** developmental and structural abnormality MPATH:55

Definitive Diagnosis:

Persistent hyaloid artery

Histopathology Comments:

hyaloid artery remnant is a rare condition in which there remain some parts of the hyaloid artery. The posterior hyaloid vascular system of mice usually undergoes involution in the first month of life (Richard et al., 2000).

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: M01093090 (Male)

Histopathology Findings:

retina (MA:0000276)**Histopath Description:**

There are clusters of external nuclear structures within the layer of rods and cons.

Morphological Diagnosis:

Distribution: Focal; **Severity:** mild; **MPATH Diagnosis:** developmental and structural abnormality MPATH:55; **MPATH Process Term:** developmental and structural abnormality MPATH:55

Definitive Diagnosis:

Retinal dysplasia

Histopathology Comments:

Retinal dysplasia is reported as a background lesion in C57BL/6N lines (Mattapallil et al., 2012).

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

A 100 stalk of fibrous connective tissue containing a small artery in the center extends from the area of the optic disc towards the posterior vitreous. A small fragment of fibrous tissue is freely present within the vitreous anterior to this stalk (assumed to be extension of the stalk).

Morphological Diagnosis:

MPATH Diagnosis: developmental and structural abnormality MPATH:55; **MPATH Process Term:** developmental and structural abnormality MPATH:55

Definitive Diagnosis:

Persistent hyaloid artery

Histopathology Comments:

hyaloid artery remnant is a rare condition in which there remain some parts of the hyaloid artery. The posterior hyaloid vascular system of mice usually undergoes involution in the first month of life (Richard et al., 2000).

heart (MA:0000072)**Histopath Description:**

There is a focal fibrosis and mononuclear inflammatory infiltrates within the right ventricle.

Morphological Diagnosis:

Distribution: focally extensive; **Severity:** mild; **MPATH Diagnosis:** inflammation MPATH:212; **MPATH Process Term:** fibrosis MPATH:181

Definitive Diagnosis:

Epicardial and subepicardial fibrosis, focal.

Histopathology Comments:

lesion was likely secondary to the sternal lesion (see below).

sternum (MA:0001331)**Histopath Description:**

There is a full thickness fissure (fracture) within the sternal cartilage accompanied by necrotic chromatin smear and multifocal degeneration and necrosis of the sternal cartilage. Within the adjacent soft tissue is focally extensive mild infiltration of neutrophils and mononuclear inflammatory cells accompanied by hemorrhage and fibroplasia. There is marked nodular hyperplasia of the cartilage tissue surrounding the fracture

Morphological Diagnosis:

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

Definitive Diagnosis:

Sternal osteoarthritis with sternal fracture with hemorrhage and fibroplasia

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

There are moderate numbers of erythrocytes within subcapsular sinuses and some are within macrophages

Morphological Diagnosis:

Distribution: multifocal; **Severity:** mild; **MPATH Process Term:** hemorrhage and non-specified extravasation MPATH:119

Definitive Diagnosis:

Sinus erythrocytosis and erythrophagocytosis

Histopathology Comments:

The lesion is suggestive of recent hemorrhage in the surrounding tissue.

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: M01028149 (Female)**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: M01028148 (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:** lymphoid hyperplasia
MPATH:147; **MPATH Process Term:** hyperplasia MPATH:134

Definitive Diagnosis:

Lymphoid hyperplasia

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

The white pulp is expanded (1.5 x normal)

Morphological Diagnosis:

Distribution: generalized; **Severity:** moderate; **MPATH Diagnosis:** lymphoid hyperplasia
MPATH:147; **MPATH Process Term:** hyperplasia MPATH:134

Definitive Diagnosis:

Lymphoid hyperplasia

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.

Line summary: None