

CMHD Pathology Core

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CMHD Pathology Report

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Mouse Genetics Project

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CMHD LabID: N13-1262

Relevant History:

Brain - beginning of hydroencephaly? vesicles were large. noted at trimming, Seminal Vesicles - Left horn reddish -brown in colour

AnimalID: M01253293 (Male)

Histopathology Findings:

sternum (MA:0001331)

Histopath Description:

There is a sternal dislocation between the 4th and 5th sternal bodies. This is encased by a large nodular cartilaginous proliferation that extends to the outer aspect of the body wall and into the thoracic cavity (reactive reparative chondroid hyperplasia)

Morphological Diagnosis:

Duration: chronic; **Distribution:** focally extensive; **MPATH Process Term:** degenerative change MPATH:14

Definitive Diagnosis:

Sternal dislocation and reactive and reparative chondroid hyperplasia ('calus')

Histopathology Comments:

The cause of this lesion is not certain.

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

Definitive Diagnosis:

accessory adrenal cortical tissue

Histopathology Comments:

This is an incidental finding

thymus (MA:0000142)

Histopath Description:

There is a 50 um diamater epithelial cyst.

Morphological Diagnosis:

Distribution: focal; **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: M01253291 (Male)

Histopathology Findings:

mesenteric lymph node (MA:0002829)

Histopath Description:

The mesenteric lymph node is markedly enlarged (greater than four-fold). The medulla is expanded by chords and sheets of lymphocytes. There are multiple germina centers.

Morphological Diagnosis:

Distribution: Diffuse; Severity: moderate; MPATH Diagnosis: hyperplasia MPATH:134;

MPATH Process Term: hyperplasia MPATH:134

Definitive Diagnosis:

Lymphoid hyperplasia with medullary plasmacytosis.

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.

brain (MA:0000168)

Histopath Description:

There is severe dilation of the lateral ventricles

Morphological Diagnosis:

Distribution: diffuse; Severity: severe; MPATH Process Term: degenerative change

MPATH:14

Definitive Diagnosis:

Dilation of the brain ventricles

Histopathology Comments:

Mild to moderate dilation of the ventricles is a background condition in mice of C57BL/6N background

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: M01253295 (Female)

Histopathology Findings:

sternum (MA:0001331)

Histopath Description:

There is a sternal dislocation between the 4th and 5th sternal bodies. This is encased by a large nodular cartilaginous proliferation that extends to the outer aspect of the body wall and into the thoracic cavity (reactive reparative chondroid hyperplasia)

Morphological Diagnosis:

Duration: chronic; **Distribution:** focally extensive; **MPATH Process Term:** degenerative change MPATH:14

Definitive Diagnosis:

Sternal dislocation and reactive and reparative chondroid hyperplasia ('calus')

Histopathology Comments:

The cause of this lesion is not certain.

heart (MA:0000072)

Histopath Description:

There is a thin patch of fibroblasts and few mononuclear inflammatory cells on the right ventricular epicardium

Morphological Diagnosis:

Duration: chronic; Distribution: focally extensive; MPATH Process Term: fibrosis MPATH:181

Definitive Diagnosis:

Right ventricular epicardial fibrosis

Histopathology Comments:

The lesion is likely secondary to the sternal lesion

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: M01253296 (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.

Report Summary and Recommendation:

Lesions in this line are incidental or attributable to strain background.

Line summary: None