



CMHD Pathology Report



CMHD Pathology Core

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ReportID: Report Date: February 26,
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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: N13-1054

Relevant History:

Phenotype:

None (no hit)

AnimalID: M01208582 (Male)

Histopathology Findings:

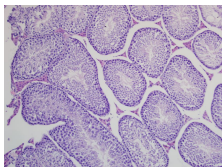
testis (MA:0000411)

Histopath Description:

Normal

Definitive Diagnosis:

Normal



Testis, normal, 20x,
HE

brain (MA:0000168)

Histopath Description:

There is marked dilation of the lateral ventricles

Morphological Diagnosis:

Distribution: diffuse; **Severity:** severe; **MPATH Diagnosis:** hydrocephalus MPATH:639;
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: M01201641 (Male)

Histopathology Findings:

testis (MA:0000411)**Histopath Description:**

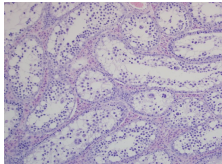
In both testis, the seminiferous tubules are diffusely depleted of spermatids, and are markedly vacuolated and contain numerous multinucleated cells.

Morphological Diagnosis:

Distribution: multifocal to coalescing; **Severity:** severe; **MPATH Process Term:** degenerative change MPATH:14

Definitive Diagnosis:

Seminiferous atrophy and vacuolation with marked germ cell depletion.



Testis, seminiferous vacuolation, germ cell depletion, multinucleated cells, 20x, HE.

epididymal duct (MA:0001735)**Histopath Description:**

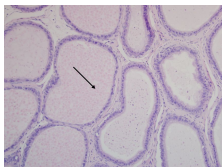
The epididymis is devoid of spermatocytes and contains abundant cellular debris and proteinaceous fluid.

Morphological Diagnosis:

Severity: extreme;

Definitive Diagnosis:

Epididymal aspermia



Epididymis, epididymal aspermia, note cell debris, 20x, HE.

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

There is a sternal fracture between the 4th and 5th sternal bodies with displacement of the sternabra into the thoracic cavity. The chondroid tissue along the fracture is markedly degenerate. There is a nodular cartilagenous proliferation at the perichondrial margins at the outer aspect of the body wall (reactive reparative chondroid hyperplasia)

Morphological Diagnosis:

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

Definitive Diagnosis:

Sternal osteoarthritis 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: M01208584 (Female)**Histopathology Findings:****sternum (MA:0001331)****Histopath Description:**

There is a sternal fracture between the 4th and 5th sternal bodies with displacement of the sternabra into the thoracic cavity. The chondroid tissue along the fracture is markedly degenerate. There is a

nodular cartilagenous proliferation at the perichondrial margins at the outer aspect of the body wall (reactive reparative chondroid hyperplasia)

Morphological Diagnosis:

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

Definitive Diagnosis:

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

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

There is focal epicardial fibrosis at the base of the right ventricle

Morphological Diagnosis:

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

Definitive Diagnosis:

Right ventricular epicardial fibrosis, focal

Histopathology Comments:

The lesion is likely caused by abrasion from fractured and displaced sternum

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

There is marked dilation of the lateral ventricles

Morphological Diagnosis:

Distribution: diffuse; **Severity:** severe; **MPATH Diagnosis:** hydrocephalus MPATH:639; **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

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

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: M01201646 (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:

Testicular atrophy and epididymal aspermia was observed in one male mouse. Sternal fracture was observed in two mice, one of which also had right epicardial fibrosis. This and the other lesions in this line are considered incidental and or attributable to strain background.

Summary:

Testis: Seminiferous tubule, degeneration/atrophy with epididymal aspermia (1/2)