

PATHOLOGY REPORT
Australian Registry of Wildlife Health

Taronga Zoo

Status: Final
Report Date: 11/07/2013

Submitter

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Submission Details

Submitter's Ref:
Date Submitted: 28-Feb-2013 00:00:00
Date Received: 28-Feb-2013 00:00:00
Lab. Case/Spec ID:
Previous Lab. ID:
Specimen ID: TARZ-9197.1

Animal Detail

Animal ID:
ARKS No:
Rehab ID: 13B146
Animal Name:
Species: Pterodroma macroptera
Common Name: Great-winged Petrel
Sex Class: Male
Age Class: Adult
Enclosure No:

Epidemiology

Number Dead: 1
Number At Risk:
Number Sick:
Number Submitted: 1
Date Died: 26-Feb-2013 00:00:00
Death Circumstance: Treated and Died

Morphometrics

Parameter	Value	Unit/Description	Date Measured	Confidence
Weight	0.460	kg	28-Feb-2013 12:25:55	
Organ/Fluid:				
Comments:				

CASE HISTORY

Washed up on north Wollongong Beach 24/02/2013. Growth on right wing, weak and very underweight (normal weight 900g). Taken to Cannon and Ball Vets. Died 26/02/2013. Placed in fridge and couriered to TWH 28/02/2013.

GROSS PATHOLOGY

External findings: There is a 3.8 cm diameter, round mass protruding from the lateral surface of the distal right ulnar region (4 cm proximal to the carpus). The mass is necrotic and foul smelling with intact skin only at the base.

Hydration: good

Fat deposits: absent
Muscle mass: reduced

Internal findings: On cut section the mass on the right wing is predominantly white, firm and shiny. The mass is not adherent to the bone or other deep soft tissue. The proventriculus is full of squid, but the rest of the gastrointestinal tract is devoid of ingesta.

HISTOPATHOLOGY

The tissues are well preserved.

Lesions are not evident within the following tissues: spleen (B), oesophagus, proventriculus, trachea, adrenal gland (C), myocardium (D).

The following observations are notable:

Brain - sagittal section(A): Virchow-Robin space is dilated. The central cerebellar white matter is mildly spongy.

Small intestine (B): Several sections of small intestine are present on the slide. Large numbers of bacilli are present in the intestinal lumen.

Pancreas (B): Proteinaceous fluid is pooled in the pancreatic ducts.

Lung (B): There is perivascular and interlobular oedema. The tissue is quite pale (anaemia?).

Kidney (C): Scattered collecting ducts contain luminal basophilic globular material.

Liver (C): The tissue is segmentally autolytic. Within the intact tissue there is multifocal portal and periportal necrosis. Other portal tracts contain mild mononuclear cell infiltrates.

Skeletal muscle - cross and longitudinal sections(D): Moderate numbers of myocytes are thin with granular change to the myofibrils. Some of these cells exhibit mild satellite cell proliferation.

Ventriculus (D): Focally a cluster of proventricular glands contain koilin plugs. The koilin layer is cellular.

Wing mass (E): The tissue is composed of a large, oval mass, which is only partially covered with epithelium. The tissue is segmentally and extensively necrotic. The viable tissue is composed of whirling bundles of spindle cells that have small round to oval nuclei and small quantities of cytoplasm. The cell population is quite uniform. Rare mitotic figures are evident. Deep within the mass are regions where the spindle cells are suspended in a pale eosinophilic matrix. In these regions the cells are larger and have oval nuclei with multiple nucleoli, and there are scattered multinucleate cells. The mass contains small numbers of clusters of mononuclear cells.

BACTERIOLOGY

OTHER MICROBIOLOGY

DIAGNOSIS

Chondroma - focal
Myodegeneration - mild, subacute
Thin

COMMENTS

Thank you for sending us this interesting case.

The petrel was found with a large mass on its wing. Histological examination of the mass found it to be most consistent with a chondroma - a tumor originating from cartilage. Although this type of tumour has been described in birds, it is not a common type of tumour in free ranging birds.

The bird was quite thin. The basophilic globules seen histologically in the renal tubules are suggestive of early urate nephrosis. Thus it seems likely that the cause of death was related to protein-calorie malnutrition and dehydration/ ischaemia. Presumably the large mass on the wing contributed to the bird's difficulty in acquiring sufficient food and water.

Other findings include degeneration of the skeletal musculature, which is most likely consistent with struggling during the stranding event.

Pathologist: Kamie Rose

Date Finalised: 11-Jul-2013 00:00:00

Copy To: Lindsay Smith - sossa@tpg.com.au and Mike Cannon -