

Pathology Report

Submitter Ref.: H287	Date Sent:	Accession No.: 58827
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To: [REDACTED]
Department of Conservation
Picton
Marlborough

Report Sent:
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Species: Cetacean	Breed: Hector's Dolphin		
Age: Adult	Sex: Female		
Owner: Department of Conservation			Type: Post Mortem
ID: H287			Prev. Accn.:
Submitted:	At Risk:	Affected:	Dead:

Gross Findings

This dolphin presented frozen and was thawed for necropsy. The body was in a good state of post mortem preservation. The body condition was extremely poor, with a highly pronounced neck, marked atrophy of lumbar muscles, and depletion of blubber (10mm dorsal, 8mm lateral and 9mm ventral).

Weight = 31.2kg, standard length = 1.415m.

There were numerous scars and lacerations over the body, of varying ages, with some being recent but not associated with haemorrhage, and others being well healed. Lacerations were linear and of varying orientations. There were no net impressions, no encircling impressions and no lacerations to leading edges of flippers or the dorsal fin. A single set of rake marks was present.

The mammary gland was discrete, with no evidence of milk on incision.

The teeth were moderately to markedly worn. There were numerous Crassicauda in the superficial muscle of the flanks.

The stomach was distended by ingesta, which included abundant seaweed, shells, leaves, pieces of wood/bark, and part of a black plastic object (similar to a hose fitting; present at the oesophageal end of the stomach). This material was admixed with abundant haemorrhagic fluid containing coffee-ground-like material (melena). Similar material was present in the distal large intestine. The mucosa of the glandular compartment of the stomach was distorted by extensive proliferation and ulceration. The distal oesophagus had marked linear ulceration with haemorrhage.

The uterus had linear striations on the serosal surface of the body and horns. The ovaries were active.

The lungs contained a single calcified nodule (likely parasite granuloma).

Histopathology

Marked multifocal myocardial fibrosis with myocardial inclusions

Gastric and oesophageal ulceration

Diagnosis

1. Severe chronic myocardial fibrosis
2. Gastric impaction with abnormal ingesta
3. Severe chronic gastric ulceration
4. Severe subacute oesophageal ulceration

Comments

This is one of the skinniest dolphins I have seen - she obviously had not been eating well for quite some time. Her stomach was full of non-prey material, which could be because she was too weak to forage for prey, or could reflect an aberrant response to pain from the gastric ulcers. Her worn teeth and some of the changes in her heart (inclusions in the heart cells) suggest that she was an aged animal. The myocardial fibrosis (a form of scar formation in the heart tissue) was quite severe, and would have affected this dolphin's ability to forage. This change has been described in several other cetacean species, but is not well understood. It can be associated with aging, but can also be a primary condition; it isn't possible to tell which is the case in this particular dolphin.

The Hector's database category for cause of death in this dolphin is "natural causes - general"

Date: 27/07/2020

Pathologists:



Students: