School of Veterinary Science

Pathology Report

Submitter Ref.: H288	Date Sent:	Accession No.: **58833**

To: [redacted]
Department of Conservation
Hokitika

Email: [redacted]

Report Sent: 31/08/2020
Copy To:

Species: Cetacean		Breed: Hector's Dolphin	
Age: Neonate		Sex: Male	
Owner:			Type: Post Mortem
ID: H288			Prev. Accn.:
Submitted:	At Risk:	Affected:	Dead:

History

Found on Cole Creek Beach, Southwestland. Washed up between 11am 31st December 2019 and 10am 1st January. Blood spatter on dolphin. No sign of net or hooks. Observer noted umbilical cord exposed.

Gross Findings

This neonatal dolphin was presented frozen and was thawed for necropsy. The body was in a moderate state of post mortem preservation. There was extensive scavenger damage around the umbilicus and anogenital orifices, with haemorrhage into the surrounding blubber. Fetal folds, fetal whiskers and lateral tongue papillae were present, and the dorsal fin was folded.
Internally, most of the large and small intestines had been scavenged. The stomach was empty. There was abundant meconium in the rectum. The lungs were heavy and dark red but floated in formalin. All remaining internal organs were soft and emphasematous (post mortem degeneration).

Histopathology

Lung: neonatal respiratory distress with marked squame aspiration, multinucleate giant cell formation, mixed alveolar and interstital inflammatory infiltrate and multifocal lymphoplasmacytic nodules; occasional intra-alveolar and intraphagocytic meconium. Lungs partially aerated
Peri-umbilical tissue: haemorrhage and inflammation - likely vital reaction
Umbilical arteries: no clot

Diagnosis

1. Perinatal death of unknown cause
2. Neonatal respiratory distress

Comments

The findings in this calf indicate that he was born alive but likely did not live for long. There are large numbers of sloughed skin cells in his lungs, along with inflammatory cells, which show that the calf went through a period of distress close to the time of birth and has breathed in amniotic fluid. This, along with the underlying cause of the in utero distress (which can't be determined from the tissues), likely meant that the calf was born weak. The haemorrhage associated with the scavenger damage around the umbilicus shows that the calf was alive at the time this damage was inflicted.
The pattern of lesions in the lung of this calf have been associated with in utero infection with Brucella in bottlenose dolphins, although there are other possible causes. The incident database category most closely relevant for cause of death is 'natural causes - general'.

Date: 13/08/2020	Pathologists: [redacted]
Students:	