

Pathology Report

Submitter Ref.: H311	Date Sent: 01/12/2022	Accession No.: 61483
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To: [REDACTED]
Department of Conservation
Christchurch

Report Sent: 05/12/2022
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Email:

Species: Cetacean	Breed: Hector's Dolphin		
Age: Neonate	Sex: Female		
Owner: Department of Conservation			Type: Post Mortem
ID: H311			Prev. Accn.:
Submitted:	At Risk:	Affected:	Dead:

History

Found at Lavericks Bay on Banks Peninsula on 30/11/22

Gross Findings

This young calf was flown to Massey and presented chilled for necropsy. The body was in a moderate state of post mortem preservation (code 2-3) and a fair body condition with a prominent neck and flattened lumbar muscle profile.

Standard length = 0.731m

Weight = 6.1kg

Blubber depth: dorsal = 12mm; lateral = 10mm; ventral = 10mm

The skin surface was covered with pitting lesions 2-5mm in diameter and extending partway through the blubber thickness with no associated haemorrhage or bruising (post mortem damage). There was some loss of skin around orifices and ventrally (decomposition change). The teeth were not erupted. Faint fetal folds were discernible, but decomposition has obscured the fetal follicles. A large number of fly larvae were present within the oral cavity. The flipper and fluke margins were dessicated, obscuring full interpretation, but no lesions suggestive of entanglement were detected.

There was a focally extensive area of subcutaneous bruising present on the left side of the occiput.

The lungs were hyperinflated, with a moderate amount of foam and fluid in the airways.

The stomach contained a small amount of watery fluid, and there was abundant meconium in the distal large intestine. The intestinal lacteals were empty. The right adrenal was mottled red.

Diagnosis

Fetal distress/maternal separation

Comments

This was a very young calf that was born alive but had not suckled and may only have survived a short time after birth. There was evidence of local blunt trauma in the form of a bruise to the left side of the back of the head; there was no associated bruising to the brain so it is difficult to be sure how significant this injury would have been. It isn't possible to determine the cause, which could involve trauma during or after the birth process.

Histologically, the presence of meconium (fetal faeces) in the lungs indicates in utero fetal stress, which can be due to dystocia (a difficult birth process) or to illness of the neonate or mother around the time of birth. There was no histological indication of a specific underlying disease process associated with this change.

In very young calves such as this one, ultimately death can be due to metabolic disturbances associated with separation from the mother. The diagnosis in these cases is assigned as 'maternal separation', while recognising that there are several possible underlying causes of this, including physical separation during a storm event, death or illness of the mother, or weakness/illness of the calf. It is very seldom possible to determine the specific cause in an individual case, although this calf had lung lesions of fetal distress along with focal bruising to the back of the head, which could reflect a difficult birth.

Date: 05/12/2022	Pathologists: [REDACTED]
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Students: