

Pathology Report

Submitter Ref.: H328	Date Sent: 01/03/2024	Accession No.: 63085
----------------------	-----------------------	----------------------

To: [REDACTED]
Greymouth
Email:

Report Sent: 06/03/2024
Copy To:

Species: Cetacean	Breed: Hector's Dolphin		
Age: Subadult	Sex: Male		
Owner:			Type: Post Mortem
ID: H328			Prev. Accn.:
Submitted:	At Risk:	Affected:	Dead:

History

Found beachcast on 9/2/24. Frozen prior to shipping to Massey.

Gross Findings

This dolphin was thawed for necropsy. The body was in a moderate state of post mortem preservation, with marked discolouration of the blubber, skin slippage, abdominal bloating and early autolysis of multiple abdominal organs. There were several linear scratches (very superficial) on the left side, all cranial to the caudal part of the dorsal fin. There were multiple randomly oriented linear skin indentations, particularly on the right side of the body, consistent with packaging marks. There were no nicks, lacerations, tears or impressions that would be consistent with bycatch. Flensing revealed gelatinous dark red discolouration of the intermandibular and ventral throat blubber (artefact). The body condition was assessed as good. The dolphin measured 1.150m in length and weighed 27.4kg. The summed testicular mass (with epididymis) was 31g. Blubber depths were 17mm dorsally, 15mm laterally and 15mm ventrally.

The lungs were well inflated, with no airway foam and minimal fluid. Blood tinged watery fluid was present in the thoracic cavity, consistent with freeze-thaw artefact. There was no ingesta in the oesophagus, oral cavity or airways. The abdominal cavity contained a large amount of thick dark red fluid, with large clots present in the caudal abdomen. The stomach was empty.

The caudal half of the right kidney was fragmented, and surrounded by a large blood clot which distended the perirenal space. Removal of the epaxial and hypaxial muscle of the caudal lumbar region showed focally extensive muscle laceration, with bruising extending along the muscle planes, particularly on the left. The spinous processes of 8 of the lumbar vertebrae were shattered and freely mobile. The left lateral processes of 4 of these vertebrae were also fractured and mobile, with haemorrhage of the associated lacerated muscle. Deep dissection to remove the muscular support of the spinal column showed complete fracture of one of the vertebral bodies.

Diagnosis

Severe fatal blunt trauma to the lumbar spine, with intra-abdominal haemorrhage

Comments

This dolphin died as a result of blunt trauma, which has fractured the vertebrae of the lower back and ruptured blood vessels in the abdominal cavity. There were no lacerations or tears of the overlying skin, suggesting that this was an impact with a large, relatively flat surface (as opposed to a keel or propellor, for example). While there is no way we can be sure what caused this, possibilities include boat strike or a marine predator such as an orca.

Date: 06/03/2024	Pathologists:
Students:	