

ANATOMOPATHOLOGICAL FINDINGS ON HARBOUR PORPOISES (*Phocoena phocoena*) STRANDED IN GALICIAN COAST, NW SPAIN

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INTRODUCTION

The coast of Galicia constitutes one of the areas with the greatest biodiversity in the North Atlantic Ocean. The local population of harbour porpoise (*Phocoena phocoena*) belongs to the meridionalis ecotype, proposed as a new subspecies with their own genetic identity. According to ICES this population constitutes a Management Unit. It is classified as “Endangered” by the Spanish legislation. Recent studies on dynamics of Iberian harbour porpoise indicate a possible short term collapse within the next 20 years.

OBJECTIVE

To determine the pathological findings and possible causes of death of stranded harbour porpoises in the last thirty years (1990-2021).

RESULTS

Macroscopically, bycatch related lesions and findings were detected in **38.2% (55/144)** of the studied animals (i.e., skin cuts and impressions producing by fishing nets, amputations, tracheal oedema, emphysematous lungs, multifocal haemorrhages, fresh prey in stomach, lymph on thoracic duct, intravascular bubbles on blood and lymphatic vessels). Parasitic bronchopneumonia with intralesional nematodes was a common finding.



a) Nematodes in the lung parenchyma



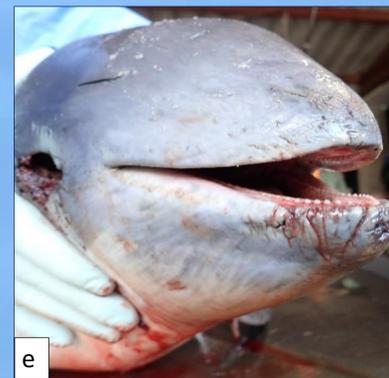
b) Lineal cut in the dorsal fin



c) Thoracic muscular and subcutaneous haematoma



d) Tracheal oedema

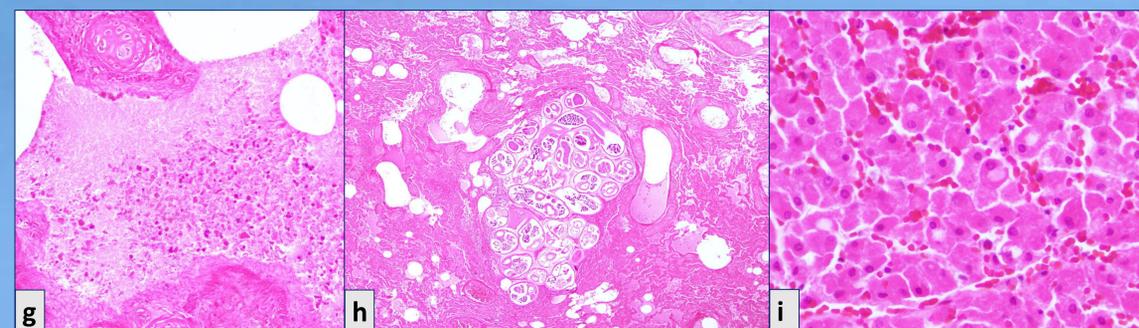


e) Net related cuts over the skin of the rostrum.



f) Skin cuts and lacerations in left pectoral fin, compatible with net.

In addition, some individuals presented lesions related with live stranding (i.e, skin abrasions, acute skeletal and myocardial muscular fibre degeneration), and interspecific traumatic event (i.e., rake marks, haematomas).



g) Alveolar oedema with macrophages and celular detritus

h) Piogranulomatous lesion with intralesional nematodes in lung

i) Intracytoplasmic hyaline globules in hepatocytes

MATERIAL & METHODS

A total of 144 harbour porpoises were necropsied following national standardized protocol. In order to have a wide view of the sanitary condition of the population, individuals of both sexes and all the physical development categories were included. Due to advance decomposition condition of individuals, only samples of 15 individuals were suitable to carry out histopathological studies. Histopathological analysis were carried out in blind trial by veterinary staff of the IUSA (ULPGC).

Microscopic examination allowed us to get a more accurate diagnosis in cases suspected of bycatch. The present pathological results also contributed to a better understanding of the health status of the porpoise population.

