CETACEANS AS SENTINEL FOR MARINE LITTER, DATA FROM THE CANARY ISLANDS (2000-2020)

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INTRODUCTION

Stranded cetaceans represent a significant opportunity to study the interaction of marine megafauna with plastic debris [a]. In the Canary Islands, the major hotspot for cetacean biodiversity in European waters, 7.7% of stranded cetaceans ingest foreign bodies (FB), and almost 3% of studied cases die due to this lethal interaction [b].

OBJECTIVE

To update the data on FB ingestion (macrolitter) and associated pathologies in stranded cetaceans from 2000 to 2020.

MATERIAL AND METHODS

Review the stranding data, necropsy reports and pictures of 682 stranded cetaceans in the Canary Islands [2000-2020]

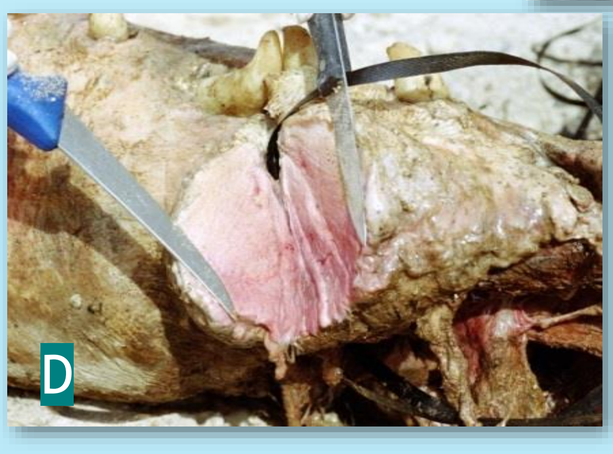
RESULTS AND DISCUSSION

⇩ Prevalence of FB ingestion 6.7% (46/682)

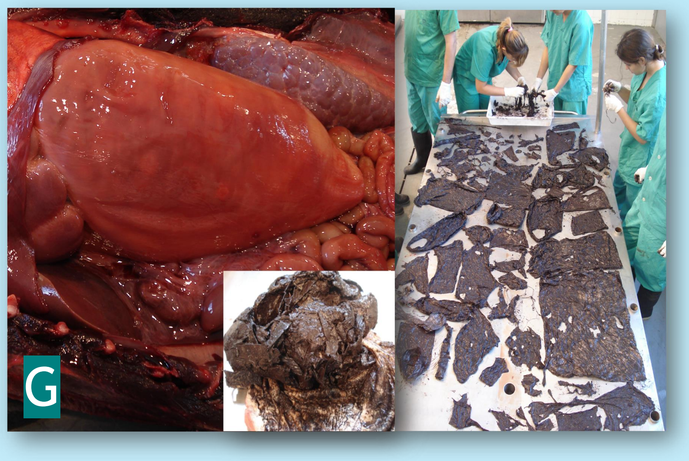
⇩ Deaths due FB ingestion (2.05%;14/682)

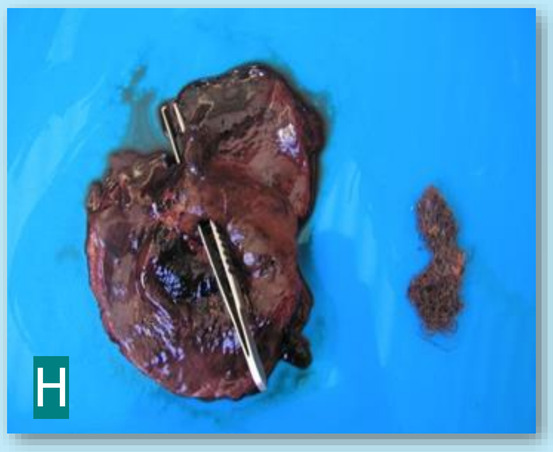
⇧ 16 cetacean species were affected mostly deep divers

- **Plastics** (91.3%; 42/46): plastic bags (A), domestic plastic debris (69%; 29/42) (B), ropes (19%;8/42) (C), nylon fishing line (9.5%; 4/42), packing (2.4%; 1/42) (D), and net remains (2.4%; 1/42) (E).
- Other FBs: metal filaments (4.3%; 2/46), clothes (2,2%; 1/46), and glass fragment (2,2%; 1/46).



- Lesions associated with FB ingestion: severe ulcerative gastritis (28.3%; 13/46) (F), gastric impactions (26%; 12/46) (G), gastrointestinal perforations (0.04%; 2/46) (H), stomatitis (0.04%; 2/46) (D,E), glossitis (0.02%;1/46) (I), cicatrized ulcers in stomach (0.02%;1/46). In some cases, advance decomposition of the carcasses impede the evaluation (32.6%; 15/456).





COVID 19 RELATED MARINE DEBRIS:

In March 2021, an adult female common dolphin (*Delphinus delphis*) (J) stranded in Tenerife presented an ingested facemask (K) within other disposable plastics and nets on the forestomach (L), which may contribute to its death. For our knowledge, this is the first report of an ingested facemask in a cetacean specimen.

REFERENCES

[a] Gobierno de Canarias. Banco de Datos de Biodiversidad de Canarias

[b] Puig-Lozano, R. (2018). Bernaldo de Quirós Y, Díaz-Delgado J, García-Álvarez N, Sierra E, De la Fuente J, et al. Retrospective study of foreign body-associated pathology in stranded cetaceans, Canary Islands (2000–2015). Environmental Pollution, 243, 519-27.