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INTRODUCTION

The Guiana dolphin (*Sotalia guianensis*) is a coastal species distributed from the southwestern Atlantic Ocean (Brazil) to the extreme north of the Caribbean Sea. This species is currently categorized as “near threatened”, specially impacted by bycatch, pollution and diseases.

CASE REPORT: On November 24, 2021, a fresh carcass (COD 2) of an adult male *S. guianensis* (186 cm total body length and 86 kg) in good nutritional condition was found stranded at Cedro beach, Ubatuba (São Paulo state, Brazil), Fig. 1A. Grossly, cutaneous verrucous masses (papillomas) were noted on the right superior lip (approximately 3.3 cm in diameter, Fig. 1B). The external exam revealed healed lesions suggestive of past interaction with fisheries (Fig. 1C), distended abdomen and severe arthrosis of the right humeroscapular articulation with notable osteophytes/enthesophytes presence, and articular degeneration of humerus and ulna, confirmed by X-ray (Fig. 1D).

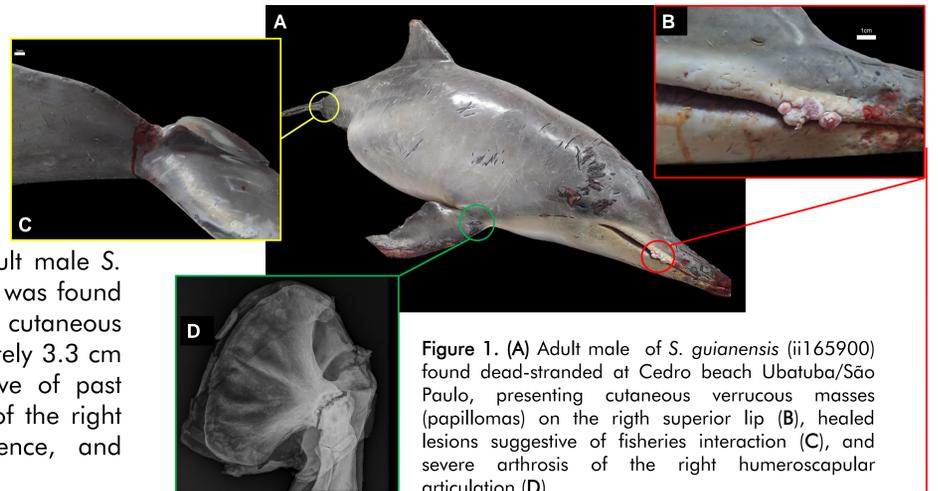


Figure 1. (A) Adult male of *S. guianensis* (ii165900) found dead-stranded at Cedro beach Ubatuba/São Paulo, presenting cutaneous verrucous masses (papillomas) on the right superior lip (B), healed lesions suggestive of fisheries interaction (C), and severe arthrosis of the right humeroscapular articulation (D).

MATERIALS AND METHODS

- A complete necropsy was performed with swabs collected for culture, and formalin-fixed and frozen tissue samples for histopathology and PCR, respectively.
- Selected samples were molecularly tested for the following pathogens: morbillivirus [reverse transcription-PCR targeting the RNA polymerase gene]¹, herpesvirus [nested-PCR partially amplifying the DNA polymerase gene of subfamilies *Alpha*, *Beta* and *Gammaherpesvirinae* and a nested-PCR specific for partial amplification of the glycoprotein B, subfamily *Gammaherpesvirinae*]^{2,3} and *Brucella* spp. [conventional PCR amplifying the IS711 gene]⁴

RESULTS AND DISCUSSION

- GROSS EXAMINATION:** main findings included granulomatous lymphadenitis (prescapular lymph nodes), a focal abscess in the right epididymis (Fig. 2A), multifocal serosal intestinal nodules, polyserositis, gastric and pulmonary parasitosis.
- HISTOPATHOLOGICAL FINDINGS:** included cutaneous squamous papilloma (Fig. 3A, B) associated to lymphocytic infiltrate, suppurative epididymitis (Fig. 2A, B, C), eosinophilic granulomatous lymphadenitis, pleuropneumonia, intestinal serositis, lymphocytic hepatitis and lymphocytic myocarditis.
- CULTURE:** *Pseudomonas aeruginosa* was isolated from epididymis and pre-scapular lymph nodes, and *Staphylococcus equorum* from peritoneum.
- PARASITOLOGY:** *Halocercus brasiliensis* (lungs) and *Braunina cordiformis* (stomach).
- PCR:** all samples were PCR-negative for morbillivirus, herpesvirus and *Brucella* spp.

See here for more details

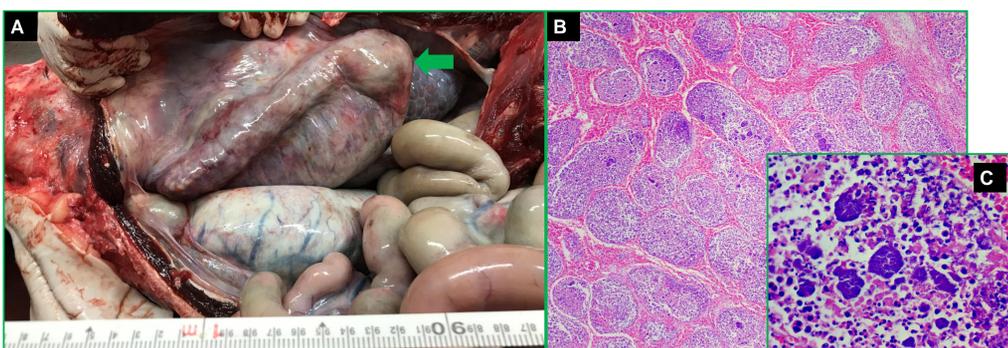


Figure 2. (A) Focally extensive bacterial abscess (green arrow) noted in the cranial epididymis of the right testicle of the *S. Guianensis*. (B) This lesion was characterized as marked multifocal suppurative bacterial epididymitis associated with mild necrosis, HE, 4X. (C) Intralysosomal bacterial colonies HE, 40x.

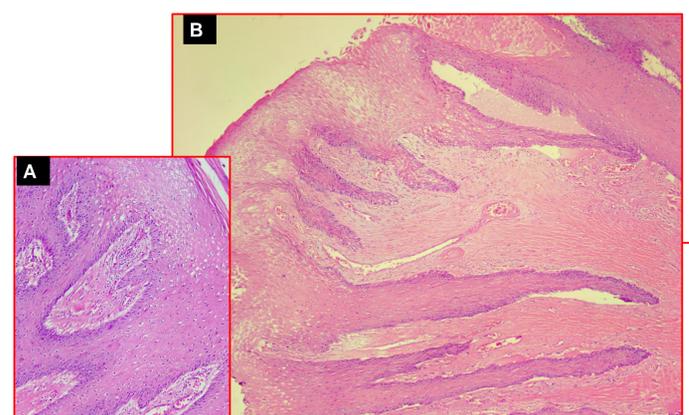


Figure 3. (A) Oral squamous papilloma, HE, 4X. (B) Mild acanthosis and vacuolar degeneration of the stratum spinosum was noted, HE, 40x.

CONCLUSIONS

The results suggests a bacterial infection as the cause of death of the individual. Further steps will include PCR analyses for papillomavirus [targeting the L1^{5,6} and E1⁷ genes] a virus previously associated with oral squamous papilloma pathogenesis in cetaceans.

LITERATURE CITED: ¹Tong et al. 2008. J. Clin. Microbiol., v.46(8):2652-2658; ²Ehlers et al. 2008. J Virol. 82:3509–3516; ³Vandevanter et al. 1996. J. Clin. Microbiol. 34:1666–1671; ⁴Batinga et al., 2018 Mol Cell Probes., v. 39:1-6; ⁵Forslund et al. 1999. J. Gen. Virol. 80, 2437-2443; ⁶Rector et al. 2005. J. Gen. Virol. 86:2029-2033; ⁷Ifner et al. 2003. Cancer Res. 63, 7515–7519.