Poster 252:

Combination of scoliosis-kyphosis-lordosis deformities and infectious processes observed in a wild adult bottlenose dolphin with by-catch evidence

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In February 2022, the Galician stranding network was notified of a dead bottlenose dolphin with a striking malformation in the peduncle. It was thought to be RA15-14, an individual with this peculiar morphology and known to local scientists since 2015. This identification was confirmed by the dorsal fin marks and the photo identification catalogue of the species in Galicia (NW Spain). Its sex was also confirmed for the first time: it was a female, with a total length of 256 cm. During the external examination, signs of by-catch were observed. Necropsy was carried out and samples were collected for radiological, histopathological, virological, parasitological, and bacteriological studies. The histopathology revealed the existence of parasitic pneumonia, leukocytosis and disseminated intravascular coagulation in several organs, and lymph node lesions, which together would indicate an infectious or septic process. Hypercontraction, hyperacidophilia, and segmental necrosis were observed in the musculature of the peduncle and in the heart. Regarding parasites, pulmonary nematodes and cyamids -the latter located in the fold formed in the dorsal part of the peduncle due to the malformation- were also recorded. Computed tomography images were analyzed to determine the malformations of the spine. Scoliosis, kyphosis, lordosis, and vertebral fusion were observed in the segment of the spine between the third lumbar and the third caudal vertebra; atlanto-occipital fusion was also observed. Anyway, the monitoring of the animals carried out for years allowed to verify that the malformation did not affect her growth and social integration into the group. Although ovaries showed corpus albicans indicative of reproductive activity, it is not known if she could have been pregnant and, if so, whether the malformation would allow her to complete the pregnancy or have a normal delivery.