NEMATODE INFESTATION IN THREE HARBOUR PORPOISES (PHOCOENA PHOCOENA) ON THE BLACK SEA COAST OF ROMANIA

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INTRODUCTION

Conservation efforts for the cetacean population are conducted every year on the Black Sea coast of Romania, and studies on cetacean diseases are crucial in identifying possible threats to the marine population. Here we report the pathological findings in three Phocoena phocoena stranded on the Black Sea coast of Romania. The study's main goal was to identify possible threats to the cetacean population and assess their implication in the stranding events.

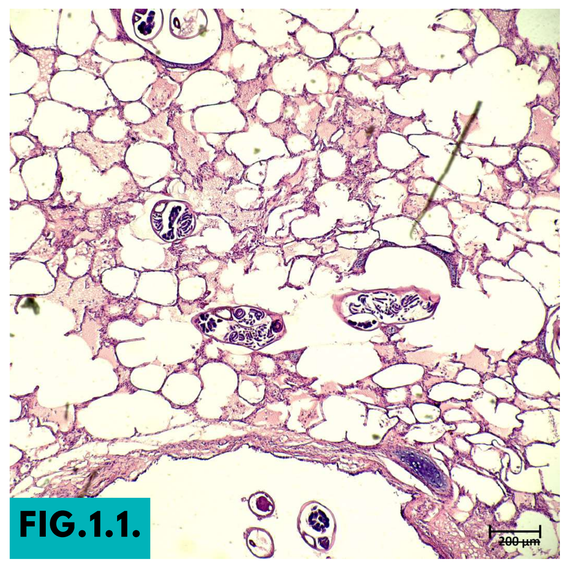

FIG.1.1.

MATERIALS AND METHODS

The study material is represented by three Phocoenaphocoena specimens stranded on the Black Sea Coast of Romania. Animals had been frozen and thawed. CT scans and complete necropsies were performed, with macroscopical assessment of cavities and organs. Histological specimens and parasitology samples were collected following the protocol for marine mammals and a standard staining technique was used (HE).

RESULTS

The CT scan showed a modified density of the internal ear in all the examined specimens. All three cetaceans had in common pulmonary nematode infestation, that caused pulmonary lesions including verminous pneumonia, catarrhal pneumonia, emphysema, and oedema. Two specimens exhibited massive nematode infestation in the internal ear obvious after opening of the tympanic bulla. Other identified lesions were gastric and intestinal haemorrhage, reactive lymph node hyperplasia, panniculitis, epidermal hyperplasia, dermal fibrosis, and gastric nematode infestation.

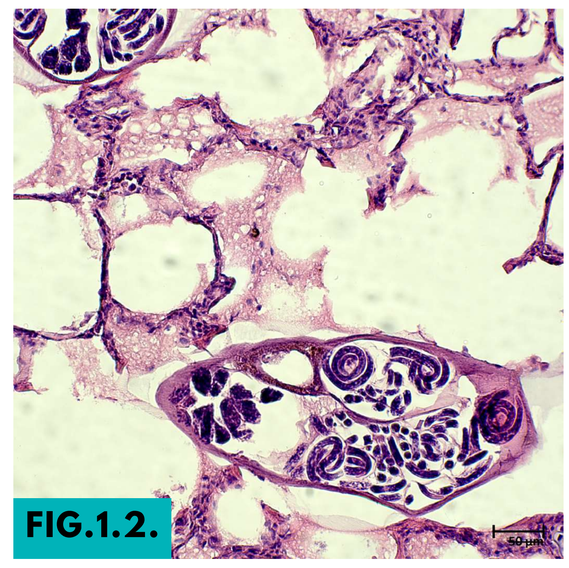

FIG.1.2.


FIG.2.1.

CONCLUSIONS

The results contribute significantly to the collected data on cetaceans from the Black Sea coast of Romania. The lesions and the abundance of the parasites certainly play a significant role in the cetacean strandings.

FIG.2.2.

Figure 1 - Lung, verminous pneumonia, catarrhal pneumonia, emphysema, and oedema, 5x (Fig. 1.1) and 20x (Fig. 1.2), H.E.
Figure 2 - Ear, massive nematode infestation, necropsy (Fig. 2.1.) and 10x, H.E. (Fig. 2.2)
Figure 3 - Large intestine, haemorrhage, 5x, H.E.
Figure 4 - Reactive lymph node, hyperplasia, 5x, H.E.
Figure 5 - Lung, verminous pneumonia, oedema, 20x, H.E.

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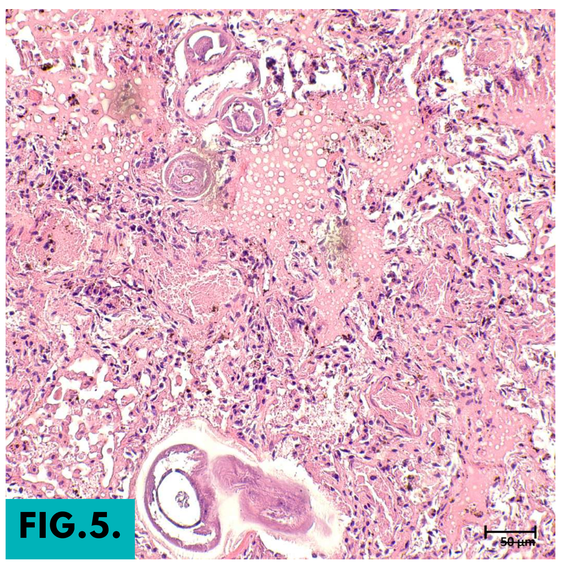

FIG.5.

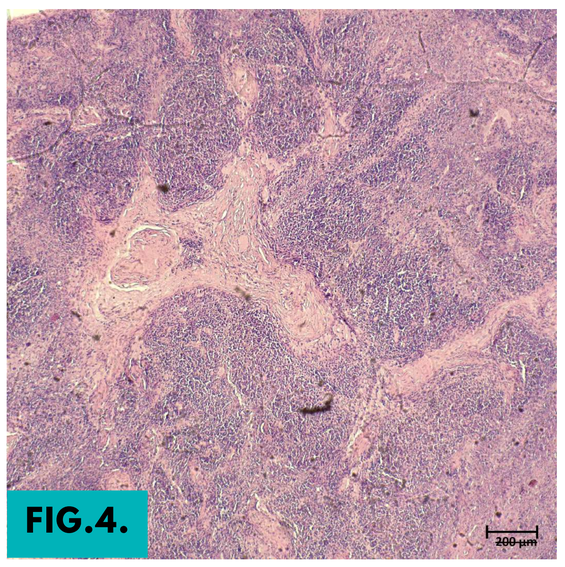

FIG.4.

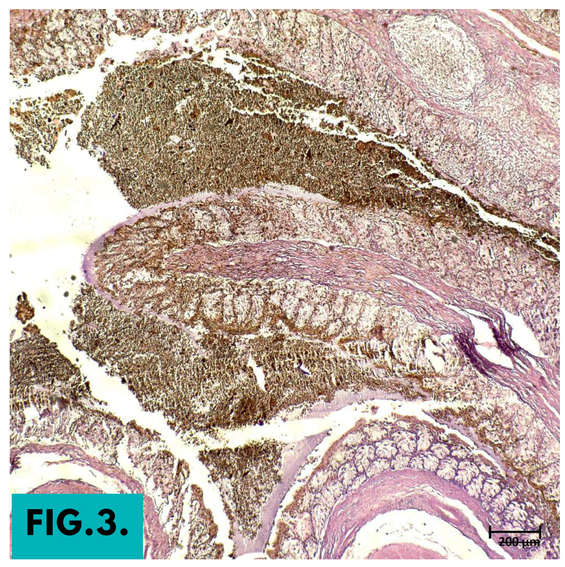

FIG.3.