# POSTER ABSTRACTS

## Veterinary Pathology: Exotic, wildlife & zoo animals

### 163 | DEADLY SERRATIA MARCESCENS INFECTION IN A BOTTLENOSE DOLPHIN (TURSIOPS TRUNCATUS)

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***Background***

Bacterial septicemia is well described in dolphins and numerous bacteria genera, such as *Erysipelothrix, Streptococcus, Aeromonas, Pseudomonas*, etc., have been associated with it. *Serratia marcescens* is a gram-negative opportunistic pathogen, scarcely described in veterinary literature, which has been referred as an etiological agent of nosocomial infections in humans, affecting the respiratory and urinary systems. This case report aims to describe the findings in a bottlenose dolphin (*Tursiops truncatus*), under human care, with a septicemia due to *Serratia marcescens*.

***Materials & Methods***

A 21-year-old, male, bottlenose dolphin with clinical history of anorexia and renal azotemia was brought for a full postmortem study. Histopathology was performed and samples from blood, urine, liver and kidney were submitted for microbiology culture.

***Results***

On gross examination, the lungs presented multiple coalescent greyish-white nodules, and both kidneys showed multiple lobes with areas of hemorrhage. The right ureter was distended and congested. Histopathology revealed a severe necrosuppurative pyelonephritis with Gram-negative bacteria and bacterial emboli; a broncho-interstitial pneumonia with embolic foci was observed as well. In aerobic and anaerobic cultures, *Serratia marcescens* was isolated from blood, urine, kidney and lung. Other findings included a very chronic and depressed scar in the right pectoral fin, which precluded the dolphin from moving it properly. There were also tattoo like lesions around the rostrum.

***Conclusion***

The pathological findings together with the isolation of *Serratia marcescens* in various tissues, including blood, are consistent with a bacterial sepsis. An ascending urinary infection is presumed to be the source of infection.