Case 15-21: Sea Turtle

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Signalment:
Juvenile, female Kemp’s ridley sea turtle

Clinical history:
• One of many sea turtles in New England mass stranding in Nov 2014
• Lethargy, abnormal buoyancy, major carapace fractures
• Slight improvement with antibiotics and NSAIDS
• Increased lung radiopacity bilaterally
Gross findings
Gross findings
Histologic findings
Fungal Pneumonia in Sea Turtles

• Sporadic – captive sea turtles
• Frequent – wild cold-stunned sea turtles
  • Failure to migrate south
  • Prolonged exposure to cold water
  • Immunosuppression
  • Increased buoyancy, predation, boat trauma, aspiration of seawater
Fungal Pneumonia in Sea Turtles

• Opportunistic saprophytic fungi
  • Paecilomyces*
  • Penicillium*
  • Fusarium*
  • Purpureocillium*
  • Colletotrichum
  • Cladosporium

• Concurrent bacterial or parasitic pneumonia
• Disseminated infections (not in this case)
"Pathologic and parasitologic findings of cold-stunned Kemp's ridley sea turtles (Lepidochelys kempii) stranded on Cape Cod, Massachusetts, 2001-2006"


- 28 total cold-stunned Kemp’s ridley sea turtles
- 11 – pneumonia
  - 5 – fungal
  - 2 – bacterial
- 5 – pleural granulomas
  - 4 – nematodes or fungal hyphae
  - 1 – larval cestodes
Winter 2014-15 Statistics

- 1232 total strandings in Massachusetts
- 240 dead
- 552 transferred:
  - 32 to National Marine Life Center
  - 3 to Woods Hole Science Aquarium
  - 14 to Pittsburgh Zoo
  - 33 to National Aquarium
  - 10 to VA Aquarium
  - 8 to NC Aquarium at Pine Knoll Shores
  - 20 to Karen Beasley Sea Turtle Center
  - 22 to NC Aquarium at Fort Fisher
  - 19 to SC Aquarium
  - 66 to GA Sea Turtle Center
  - 72 to Sea World Orlando
  - 8 to Disney
  - 73 to Gulf World
  - 12 to Miami Seaquarium
  - 11 to Gumbo Limbo
  - 30 to the Turtle Hospital in Marathon
  - 10 to the FL Aquarium
  - 27 to Aquarium of the Americas
  - 32 to Institute for Marine Mammal Studies
  - 50 to NOAA Galveston Lab
Questions?

Acknowledgments
Craig A. Harms
Laura Fusaro
John M. Cullen
Keith E. Linder
Sandra Horton & NCSU Histology Laboratory
Residents: Laura White, Jessica Durrant, Janice Harvey

References:
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