Juvenile

Adult

ZEBRA SHARK
(STEGOSTOMA FASCIATUM)
A9-012848-4

Dave Marancik
University of Georgia CVM
Department of Pathology
History

- Juvenile, 2.5 kg, 105 cm, zebra shark
- Euthanized after 5 month period of progressive neurologic signs
Normal Liver Architecture

- High lipid content
- No distinct lobulation
  - No typical portal triads
- Prominent serosal mesothelium
Hi

Histopathology

Multifocal loss of cellular detail

Pyknosis
Karyorrhexis
Deposition of cellular debris
PAS Stain
Hepatic Lipid Depletion

Normal elasmobranch liver

Our fish
Morphologic Diagnosis

- Liver: Hepatitis, necrotizing, multifocal to coalescing, acute, moderate, with intraparenchymal and intravascular fungal hyphae

- Phaeohyphomycosis
  - *Exophiala pisciphila*
  - Present in gill, spleen
Additionally...

- Mucor present in heart
- Granulomatous inflammation and necrosis in brain
Systemic Fungal Infections

- Superficial fungal infections not uncommon
  - Phaeohyphomycoses
  - Zygomycetes- Mucor
  - Fusarium

- Systemic infections not documented

Blood Culture Results from Healthy Captive and Free-Ranging Elasmobranchs

NATALIE D. MYLNICZENKO,*1 BRIGITA HARRIS, AND RACHEL E. WILBORN John G. Shedd Aquarium, 1200 South Lake Shore Drive, Chicago, Illinois 60605, FORREST A. YOUNG Dynasty Marine Associates, 10602 7th Avenue Gulf, Marathon, Florida 33050, USA
The end...