IDL16-4975

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History & Signalment

- Wild-caught purple firefish (*Nemateleotris decora*)
- Adult male
- Found dead in tank
- Protozoa consistent with *Uronema* sp. identified on post-mortem skin scrapings

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Gross Findings

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In Dorsal Aorta?

Kidney

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In Dorsal Aorta?

Kidney

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Egg Sacs

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Morphologic Diagnoses

- **Kidney:** Copepod parasitism of the kidney and dorsal aorta with renal compression and atrophy

- **Skin and skeletal muscle:** Locally extensive ulcerative dermatitis and necrotizing myositis with gram-negative bacilli
Skin Ulcer and Necrotizing Myositis

- *Uronema* sp. – none found on histopathology
  - Lost during processing or fixation?

- Gram-negative bacilli – opportunistic marine pathogens
  - *Vibrio* spp. likely

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Copepod Parasites of Fish

- Copepods are crustacean parasites
- Complex life-cycles: free-living stages and 1-2 fish hosts
- Adult females are highly modified to attach to host
- Family Pennellidae: *Lernaeocera, Peroderma, Cardiodectes, Phrixocephalus* spp.
  - Embed cephalothorax into host tissues
  - Arborizing holdfast within host viscera

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Copepod Parasites of Fish

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Acknowledgements

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