

CASE NUMBER: 03F-25-A3.4-9

DATE: May 5, 2003

**MORPHOLOGIC DIAGNOSES:**

Slide 19, A3.4-9-1:

1). Heart: Epicarditis, mild to moderate, diffuse, lymphohistiocytic with scattered edema fluid

There are no overt lesions within sections of the kidney, spleen, liver, peripheral nerves or peripheral vasculature.

Slide 20, A3.4-9-2:

- 1). Kidney: Nephritis, interstitial, diffuse, marked, necrohemorrhagic, acute, with dispersed melanin granules
- 2). Spleen: Splenitis, marked, diffuse, necrohemorrhagic with fibrin deposition, acute
- 3). Liver, hepatocytes: Degeneration and necrosis, moderate, multifocal, random, acute

There are no overt lesions within sections of the peripheral nerves or peripheral vasculature.

Slide 21, A3.4-9-3:

- 1). Kidney: Nephritis, interstitial, diffuse, marked, necrotising, acute
- 2). Spleen: Splenitis, moderate, multifocal, necrohemorrhagic with fibrin deposition, acute
- 3). Liver, hepatocytes: Degeneration and necrosis, moderate, multifocal, random, acute

There are no overt lesions within sections of the peripheral nerves or peripheral vasculature.

Slide 22, A3.4-9-4:

- 1). Kidney: Nephritis, interstitial, diffuse, severe, necrohemorrhagic, acute, with dispersed melanin granules
- 2). Spleen: Splenitis, marked, diffuse, necrohemorrhagic with fibrin deposition, acute
- 3). Liver, hepatocytes: Degeneration and necrosis, mild, multifocal, random, acute

There are no overt lesions within sections of the peripheral nerves or peripheral vasculature.

Slide 23, A3.4-9-5:

As in slide 22.

Slide 24, A3.4-9-6:

As in slide 22.

Slide 25, A3.4-9-7:

As in slide 22, but with massive necrosis of involved parenchyma.

Slide 26, A3.4-9-8:  
As in slide 22.

Slide 27, A3.4-9-9:  
As in slide 22.

Slide 28, A3.4-9-10:  
As in slide 25.

Slide 29, A3.4-9-11:  
As in slide 22, but milder involvement of involved parenchyma.

Slide 30, A3.4-9-12:  
As in slide 29.

Slide 31, A3.4-9-13:  
As in slide 25 with focal granuloma formation within the splenic stroma.

Slide 32, A3.4-9-14:  
As in slide 25.

Slide 33, A3.4-9-15:  
As in slide 25, but with focal granuloma formation moderately deep within the renal parenchyma.

Slide 34, A3.4-9-16:  
As in slide 22.

Slide 35, A3.4-9-17:  
As in slide 22.

Slide 36, A3.4-9-18:  
As in slide 22.

Slide 37, A3.4-9-19:  
As in slide 25.

#### COMMENTS:

With the exception of slide 1, histopathology revealed consistent submassive to massive necrosis of hematopoietic elements within the liver and spleen with variably involvement of the liver and heart. This necrotising process is admixed with variable amounts of acute hemorrhage, fibrin deposition and dispersed melanin granules and would have contributed significantly to antemortem morbidity. Based on the lack of any apparent regenerative response and the acute nature of the lesions, the prognosis for recovery within the stock would be grave. The lesions are consistent with an acute viral infection,

possibly infectious hematopoietic necrosis (IHNV) and if fresh tissue is available follow up viral culture or molecular studies are strongly recommended. As this is likely a contagious pathogen, introduction of naïve stock into, or removal of possible carrier fish out of the enclosure should be restricted. The renal and splenic granulomas noted in select slides are indicative of a pre-existing low grade inflammatory process, possibly due to bacterial kidney disease. These granulomas are considered incidental and of limited pathologic significance.

**\*FINAL REPORT\***