

CASE NUMBER: 03F-25-A3.4-5

DATE: May 11, 2003

**MORPHOLOGIC DIAGNOSES:**

Slide 74, A3.4-5-1:

- 1). Liver, hepatocytes: Degeneration and necrosis, mild, multifocal, acute
- 2). Heart, ventricle: Myocarditis, moderate, multifocal, subacute with scattered intralesional coccobacilli morphologically consistent with *Aeromonas salmonicida*
- 3). Spleen, ellipsoids: Hyperplasia, mild to moderate, multifocal

There are no overt lesions within the kidney, peripheral nerve or peripheral vasculature.

Slide 75, A3.4-5-2:

- 1). Heart, spongy layer: Embolism, septic, marked, multifocal, random, acute with necrosis
- 2). Spleen, lymphocytes: Depletion, moderate, diffuse, acute

There are no overt lesions within the liver, kidney, peripheral nerve or peripheral vasculature.

Slide 76, A3.4-5-3:

There are no overt lesions within the heart, spleen, liver, kidney, peripheral nerve or peripheral vasculature.

Slide 77, A3.4-5-4:

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

Slide 78, A3.4-5-5:

- 1). Heart, spongy layer: Embolism, septic, mild, multifocal, random, peracute
- 2). Liver, sinusoids: Hemorrhage, mild to moderate, multifocal, random, acute

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

**COMMENTS:**

There is considerable variation not only between the examined sections, but also within individual tissues of each slide; in the more severely affected animals, slides 74, 75 and to a much lesser extent, 78, the acute septicemia would have contributed at least moderately to antemortem morbidity. Based on the morphology of the bacteria, lack of attendant inflammatory infiltrate and associated necrosis (in more severely affected areas), the organism is most likely *Aeromonas salmonicida*, however, more precise speciation would entail bacterial culture or molecular studies of fresh tissues, immunohistochemistry or some other ancillary investigations. As these animals were likely shedding pathogens antemortem, additional stock have presumably been exposed

and are possibly infected. Fish should be closely monitored for possible development of clinical signs and appropriate antimicrobial therapy initiated as warranted.

**\*FINAL REPORT\***