

CASE NUMBER: 03F-49-A2.3-38

DATE: Aug 9, 2003

**MORPHOLOGIC DIAGNOSES:**

Slide 143, A2.3-38-1:

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

Slide 144, A2.3-38-2:

- 1). Kidney: Nephritis, interstitial, mild, multifocal, lymphohistiocytic, chronic
- 2). Heart: Myocarditis, mild, multifocal, random, mononuclear, chronic with scattered karyomegally and compensatory myofiber hypertrophy

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

Slide 145, A2.3-38-3:

- 1). Liver: Hepatitis, mild, focal, fibrinonecrotising, acute
- 2). Heart, spongy layer: Myocarditis, mild, multifocal, subacute

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

Slide 146, A2.3-38-4:

- 1). Kidney: Hemorrhage, mild to moderate, diffuse, acute, with scattered pyknosis and karyorrhexis
- 2). Liver: Triaditis, mild to moderate, multifocal, subacute

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

Slide 147, A2.3-38-5:

- 1). Heart, spongy layer: Thrombosis and platelet aggregates, moderate, multifocal, random with scattered karyomegally and compensatory myofiber hypertrophy

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

Slide 148, A2.3-38-6:

- 1). Liver: Granuloma, mild, focal, chronic
- 2). Spleen: Congestion and hyperemia, moderate, diffuse

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

Slide 149, A2.3-38-7:

1). Liver: Triaditis, mild, focal, lymphohistiocytic, chronic

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

Slide 150, A2.3-38-8:

- 1). Heart: Myocytolysis, moderate, multifocal to coalescing, acute
- 2). Liver: Triaditis, moderate, multifocal, lymphohistiocytic, chronic
- 3). Kidney: Hemorrhage, mild to moderate, diffuse, acute, with scattered pyknosis and karyorrhexis

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

#### COMMENTS:

With the exception of the acute myocytolysis noted in slide 150 and low grade myocardial hypertrophy and platelet aggregation in select sections, there are no significant lesions which may adversely growth or performance of these fish. In a small number of heart sections, there is compensatory cardiac hypertrophy (and platelet aggregation) suggestive of a possibly underlying cardiac derangement; whereas, in slide 150, the cardiac myocytolysis is profound and presumably would have contributed to impaired cardiac performance. It is difficult to resolve whether these processes represent a progression along a continuum or distinct pathologic processes. Degenerative changes in the hearts of farmed salmonids have been associated with cestodiasis, bacteremias, nutritional derangements, congenital anomalies, metabolic disorders (increased ambient water temperatures, acidosis, and hypoxia), and other factors. Myocarditis was detected in a small number of sections and this process is considered distinct to the myocardial degeneration. The triaditis is low grade, non-specific and likely reflects a retrograde infection from the gastrointestinal tract.

\*FINAL REPORT\*