

CASE NUMBER: 03F-25-P3-15

DATE: May 11, 2003

MORPHOLOGIC DIAGNOSES:

Slide 82, P3-15-1:

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

Slide 83, P3-15-2:

- 1). Kidney, glomeruli: Glomerulonephritis, membranous, moderate, diffuse
- 2). Kidney, hematopoietic tissue: Hyperplasia, lymphomyeloid, moderate, diffuse

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

Slide 84, P3-15-3:

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

Slide 85, P3-15-4:

- 1). Heart, spongy layer: Myocarditis, moderate, multifocal, lymphoplasmacytic, chronic with scattered reactive endocardia

There are no overt lesions within the pancreas, corpuscle of Stannius, adipose tissue, liver, spleen, peripheral nerves or peripheral vasculature.

Slide 86, P3-15-5:

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

Slide 87, P3-15-6:

- 1). Adipose tissue: Steatitis, moderate, diffuse, granulomatous, chronic with mesothelial papillary to filariform hyperplasia

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

COMMENTS:

Although there are no consistent lesions within the examined slides, within select sections, there are some interesting and unique lesions. In slide 83, involving virtually all of the sectioned glomeruli, there is generalized expansion of mesangia by acellular proteinaceous material suggestive of a membranoproliferative process. In fish, this is commonly associated with marine anemia and less frequently chronic bacterial kidney disease and other disease conditions. As the species and health status of fish are unknown, and there is no gastrointestinal or extraocular fibroadipose tissue to evaluate, the precise pathogenesis of this condition remains unknown. The hematopoietic tissue is

hyperplastic, however, there is a more pleomorphic cell population than would be appreciated by a plasmacytoma (as seen in marine anemia) and the possibility of a chronic, non-specific inflammatory process remote or removed from the examined tissues cannot be discounted. There does not appear to be any splenic involvement which suggests a more localized process. Similar cellular aggregates are noted within the spongy layer of the ventricular myocardium in slide 85 and to a much lesser extent, within the stroma of fat lobules of slide 87. If possible, follow up evaluation of additional stock with more representative tissues may be considered as well as ancillary laboratory studies (molecular studies to exclude *Loma*, *Nucleospora*, *Renibacterium salmoninarum* or other chronic infections) may be considered.

FINAL REPORT