38th ANNUAL DIAGNOSTIC SLIDE SESSION

1997

CASE 1997-1

Submitted by: Dr. Juan M. Bilbao, St. Michael's Hospital, Toronto, Ontario, CANADA

Diagnosis: Chloroquine neurotoxicity (neuropathy), in a patient with plasma cell dyscrasia, longstanding monoclonal gammopathy (IgG) and history of systemic lupus erythematosus treated with chloroquine.

Comment: Lamellar inclusions are seen within the myelinated fibers.

References:


CASE 1997-2

Submitted by: Drs. Yves Robitaille, Stéphane Ledoux, and Neil Cashman, Ste. Justine and Montreal Neurological Hospitals, Montreal, Québec, CANADA

Diagnosis: Intranuclear inclusion body disease, with atypical features

Comment: Some neuronal loss was apparent in the basal ganglia and substantia nigra, although not in the cerebral cortex.

References:


**Case 1997-3**

Submitted by: Drs. Maryam Mohammadkhani, Kathy L. Newell, and E. Tessa Hedley-Whyte, Massachusetts General Hospital, Boston, MA.

Diagnosis: Rupture of massive mitral annulus calcification with fatal systemic embolization

Comment: In retrospect, tiny calcifications could be appreciated on CT scan of the brain. Grossly at autopsy, the mitral annulus was chalky-white and fluid-like. There were emboli in multiple systemic organs.

References:


**Case 1997-4**

Submitted by: Dr. Jeanne Bell, Western General Hospital, Edinburgh, UK.

Diagnosis: New variant Creutzfeldt-Jakob disease

Comment: The pathology is quite uniform throughout the cerebral cortex, and hence a
Cerebral biopsy is likely to disclose the characteristic plaques with spongiform change. In addition, PrP<sup>res</sup> can be demonstrated in biopsy of the tonsil.

References:


Case 1997-5

Submitted by: Drs. Hindi N. Al-Hindi and Clayton A. Wiley, Presbyterian University Hospital, Pittsburgh, PA, and Dr. William E. Ballinger Carolinas Medical Center, Charlotte, NC.

Diagnosis: Severe meningoencephalitis associated with JC virus and HIV infection

Comment: There is extensive necrosis. In atypical cases of this sort, it is usual that only rare cells can be demonstrated to contain JC virus. In addition, herniation has been reported to occur in cases of PML.

References:


Case 1997-6

Submitted by: Dr. Anthony T. Yachnis, University of Florida, Gainesville, FL.

Diagnosis: Microsporidiosis involving the central nervous system

Comment: Organisms can be well demonstrated by the use of plane polarized light. The actual organism in this case was *Trachipleistophora hominis*. Treatment is with albendazole.

References:


Case 1997-7

Submitted by: Dr. Leila Chimelli, School of Medicine of Ribeirão Preto, BRAZIL

Diagnosis: Cerebral trypanosomiasis (Chagas disease).

Comment: The diagnosis of *Trypanosoma cruzii* infection was confirmed by immunocytochemistry.

References:


Case 1997-8

Submitted by: Drs. James M. Henry and Alan L. Morrison, Armed Forces Institute of Pathology, Washington, DC

Diagnosis: Rabies.

(Also, microabscess formations, multifocal, consistent with Candida.)

Comment: The hippocampal section was loaded with Negri bodies, but the cerebellar section had few Purkinje cells, making recognition of them more difficult. Lack of inflammation in the hippocampus is characteristic. Nucleotide sequence analysis of the rabies strain in this case was similar to that found in the Mexican freetailed bat.

References:


Case 1997-9

Submitted by: Drs. Brian Summers and Alexander de Lahunta, College of Veterinary Medicine, Cornell University, Ithaca, and Dr. John Speciale, Rochester, NY.

Diagnosis: Feline ischemic encephalopathy, a syndrome of cerebral infarction in the domestic cat recently associated with Cuterebra sp. myiasis.

Comment: This case is unusual, since the remains of the parasite (the fly Cuterebra) are still present. The disease in cats is most common in the summer months.

References:

Feline ischemic encephalopathy and feline CNS cuterebra:

Cook JR, Levesque DC, Nuehring LP: Intracranial Cuterebral myiasis causing acute lateralizing meningoencephalitis in two cats. Journal of the American Animal Hospital
Case 1997-10

Submitted by: Drs. Hans H. Goebel and J.K. Mellies, Mainz University, Mainz, and Municipal Hospital, Osnabruck, GERMANY

Diagnosis: CADASIL (cerebral autosomal-dominant arteriopathy with subcortical infarcts and leukoencephalopathy)

Comment: The specimen was a skin biopsy, with characteristic small granular inclusions in the basal lamina of blood vessels.

References:

