25th Annual Diagnostic Slide Session - 1984

CASE 1

Several discussants made a diagnosis of Wegner's granulomatosis. Others felt that this was inconsistent with the absence of lesions in other organs. The diagnosis of the presenters was Tolosa-Hunt syndrome.

1. Tolosa E. Periarteritic lesions of the carotid siphon with the clinical features of a carotic infraclinoidal aneurysm. J. Neurol Neurosurg Psychia 1954:17:300-302.

2. Hunt WE, et al. Painful ophthalmoplegia: its rebation to indolent inflammation of the cavernous sinus. Neurol 1961; 11:56-62.

3. Hunt WE. Tolosa-Hunt syndrome: One cause of painful ophthalmoplegia. J. Neurosurg 1976; 544-549.

4. Inzitari D, et al. The Tolosa-Hunt syndrome: Further clinical and pathogenetic considerations based on the study of eight cases. J Neurol 1981; 224:221-228.

CASE 2

There was general agreement on the diagnosis of acantoamoebiasis. However, the organism reacted only weakly in the immunoperoxidase stain. Skin was suggested as the portal of entry. It was pointed out that some patients with chronic renal disease on dialysis have T cell deficiencies. Several people commented on the absence of granulomatous changes.

CASE 3

There was general agreement that this was disseminated herpes zoster leukoencephalitis. The question of the concomment presence of cytomegalic inclusion disease was also raised. Electron microscopy revealed herpes virus and the immunologic stains for Zoster were positive. Inclusions were also seen in the dorsal root and in the ependyma. The latter were negative for CMV with immunoperoxidase staining.

CASE 4

There was general agreement that this was multiple sclerosis. Some lesions were centered around veins, resembling experimental allergic encephalomyelitis and suggesting a link between the two conditions.

CASE 5

This was a case of Rocky Mountain Spotted Fever with lesions confined to the brain. These consisted of areas of vasculities with fibrin infiltration into the parenchyma. Microglial nodules were absent or rare. The lesions were not seen on some of the slides.

CASE 6

The diagnosis was neurosyphilis in association with Parkinson's disease. The spinal fluid serology was positive but no organisms could be demonstrated by immunologic staining methods or electron microscopy. This was attributed to treatment. The absence of rod cells was commented upon by some observers, others disagreed.

CASE 7

The diagnosis was metastatic myxoma. The presenters demonstrated myxomotous tissue like that found in the original surgical specimen. Several discussors, however, reported that they found no tumor, but only organized blood clot in their sections.

Desousa AL, et al. Atrial myxomas: A review of the neurological complications, metastases, and recurrences. J Neuol Neurosurg Psychia 1978; 41:1119-1124.

CASE 8

A descriptive diagnosis of hemorrhagic white matter necrosis was made. This is basically an anoxic-ischemic lesion. The presenters suggested that there may be a pathogenic relationship to the hypertension associated with clamping of the aorta.

1. Young RS, et al. Hypernatremic hemorrhagic encephalopathy. Ann Neurol 1979; 5:588-591.

2. Burger P.C., Vogel FS. Hemorrhagic white matter infarction in three critically ill patients. Hum Path 1977; 8:121-132.

3. Ginsburg MD, et al. Hypoxic -ischemic leukoencephalopathy in man. Arch Neurol 1976; 33:5-14.

4. Feigin I, et al. Degeneration of white matter in hypoxia, acidosis, and edema. J Neuropath Exp Neurol 1973: 32:125-143.

CASE 9

The patient was treated by both radiation and chemotherapy. The tumor recurred and spread in the subarachnoid space. The patient expired one year after surgery. There was general agreement that the diagnosis was ganglioneuroma and glioblastoma multiforme. It was pointed out that such tumors have a perpensity to spread in the subarachnoid space.

CASE 10

The diagnosis was paraganglioma of the filum terminale. The tumor was negative on PTAH & GFAP staining but stained positively for neuron-specific enolase. These tumors are solitary, circumscribed and not associated with local seeding. They can be curved by surgical extrication. Additional radiation is not indicated.