

19th Annual Diagnostic Slide Session

Case 1

The additional history was given that the patient at age 6 was shot in the head with a B-B gun while playing baseball. The lesion is a foreign body granuloma containing fragments of iron and copper as well as nylon, the latter from the patient's baseball cap.

Case 2

The additional information was given that the patient had a mass in the lung and buttocks and that the tumor cells contain membrane bound PAS positive silver negative crystals. A biopsy of the lesion of the buttocks showed similar histology. The final diagnosis was metastatic alveolar cell sarcoma. This is a descriptive diagnosis of a tumor which is related to paraganglioma.

Case 3

Although the question of inflammatory myopathy was raised, the final diagnosis was lymphoma. The role of immunosuppression was discussed and many felt that the localization of the disease to voluntary muscle was related to this factor.

Case 4

The presentors made a diagnosis of astroblastoma on the basis of perivascular arrangement and positive silver carbonate staining. This was challenged by several members of the audience because of negative staining for glial fibrillary acidic protein. The final diagnosis was papillary meningioma, also called angioblastic variant of meningioma. The presentors responded by pointing out that the ultrastructure of the tumor does not have the interdigitating cell border of a meningioma.

Case 5

Additional information was offered that the lesions were all of the same age and that there was preservation of axis cylinders. Most commentators felt that this was a case of acute multiple sclerosis rather than acute disseminated encephalomyelitis. It was pointed out that the former disease may be precipitated by immunizations.

#### Case 6

It was pointed out that the clinical symptoms in this patient are those of Castleman's Disease which is associated with a benign tumor called a lymphoid hamartoma (NEJM, 280:922, 1969). The abundant lymphoid and plasma cell elements in this tumor might be related to this. Other diagnoses were malignant chordoma, teritoid tumor, and angioblastic meningioma. There was no general concensus as to diagnosis.

#### Case 7

Most commentators felt that the circular structures observed in this slide were swollen axons and that this was a form of neuraxonal dystrophy. The presenter challenged this on the basis that the structures were often associated with nuclei, were often perivascular in distribution, and did not have the ultrastructure of swollen axons, but rather resembled glial cytoplasmic structures described in association with neuraxonal dystrophy (Arch. Neurol. 35:329, 1978). It was also suggested that the structures were degenerating corpora amylacea.

#### Case 8

Further information presented at the session included the fact that the basophilic bodies associated with the lesions were PAS positive, that there were also lesions in the heart and liver and that the formalin fixed white matter showed an increase in hexose. A diagnosis of polysaccharidosis was made by the presenter. One of the discussants described a similar case which was called "polyglucosan body axonopathy" (J. Neuropath. Exp. Neurol. 37:598, 1978).

#### Case 9

Further information presented at the meeting was that the patient had lamellar bodies in both the adrenal and testis. A diagnosis of adrenal leukodystrophy was made. It was pointed out that this case is unusual both in the late age of onset and the predominance of frontal lesions.

#### Case 10

Further information given at the meeting was that the patient had a 7 year history of seropositive rheumatoid arthritis and at autopsy had numerous rheumatoid nodules in the joints and heart valves, as well as in the dura.