CASE 1991-6

Submitted by: Leroy R. Sharer, M.D., Laboratory Medicine and Pathology, UMD-New Jersey Medical School, 185 South Orange Avenue, Newark, NJ 07103; and Gary B. Baskin, Tulane Regional Primate Research Center, Covington, LA 70433

Case Reference Number: NJMS CP90-11, OS90-5254; Tulane 90 A331.

Clinical History:

Animal H 822, a male rhesus macaque, was inoculated IV with the Delta B670 strain of simian immunodeficiency virus (SIV) at age 17 months. Within one week the animal developed diarrhea, which was intermittent thereafter, with some dehydration as well. Giardia was identified in the stool, along with Balantidium and Trichomonas, one and one half months after inoculation. A 2+ positive Coombs test was noted six months later, but the hematocrit remained normal. Fourteen months after inoculation, at age 2 years and 7 months, the animal was noted to have diffuse red spots on his muzzle, with some epistaxis, but a CBC was normal. The red spots resolved spontaneously in one month. At 2 years 9 months he developed diarrhea due to Campylobacter jejuni, treated with erythromycin and ciprofloxaxin. One month later the animal was noted to be thin and pale and in poor general condition; an ophthalmological examination revealed mild hyperemia of the optic discs. At 2 years 11 months there were small red plaques on the hard palate, with slight epistaxis. The hematocrit dropped suddenly, from 37% to 30%.

Two weeks later the animal was noted to be generally depressed, with head tremors, weakness and incoordination. Both pupils were maximally dilated, with no response to light. The skin was dry, with slight seborrhea. Lymph nodes were smaller than normal. The animal developed diarrhea, with a positive culture for C. jejuni. The animal was begun on erythromycin, but, for humane reasons, a decision was made to perform euthanasia. Death occurred two days after the onset of neurological symptoms, or 18 months after inoculation with SIV.

Necropsy Findings: Autopsy disclosed cachexia and lymphoid atrophy. There were glossitis due to Candida and gastritis due to Trichomonas. Giant cell inflammation was noted in the submucosa of the small intestine and colon, as well as in mesenteric lymph nodes. There was also glomerulosclerosis. The brain exhibited congestion of the leptomeninges but was otherwise grossly normal.

Material Submitted: One H&E stained slide of brain.

Point for Discussion: Diagnosis.