Case #6

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The patient was a 59 year old woman, known to be hypertensive for at least ten years, and treated intermittently for this condition. Twenty days before death, lower abdominal and back pain began, accompanied by nausea and vomiting. Two days before admission, a generalized maculopapular rash was noted and she was seen in a clinic where hypotension was also noted. Admission followed examination of a peripheral blood smear, and a white blood cell count showing leukemia with 150,000 WBC.

After a bone marrow examination, a diagnosis of acute monocytic leukemia was made, and appropriate chemotherapy was instituted. Bilateral pulmonary infiltrates were noted and hypoxia was thought to be a major problem. Prothrombin time was prolonged, A/G was 3.7/2.8, alkaline phosph. was 150. SGOT was 70 and LDH was over 600. The patient died "suddenly" three days after admission. No evidence of neurologic dysfunction was recognized.

In addition to the pathologic changes in the CNS, autopsy revealed leukemic infiltrates in virtually every organ including lungs and liver. The liver weighed 1900 grams. The heart weighed 450 grams and exhibited left ventricular hypertrophy. Pneumonia was not found.

The lesions in the brain were restricted to the pons and for the most part consisted of bilaterally symmetrical areas, which were separate through most of the pons, but were connected at one level by a narrow bridge of similarly affected tissue. A diagnosis of central pontine myelinolysis was made.

Points for Discussion:

1. Is the distribution of the lesion within the pons really as rare as our search of the literature indicates? Does central pontine myelinolysis begin as a peripheral lesion?
2. Venules at the margin of the lesion are packed with blasts. Similar findings were present but far less common elsewhere in the brain. Could venous blockade have contributed to the lesion?
3. What is the contribution of liver disease?