

CASE 1992-5

Submitted by: Harris Goodman, M.D., Department of Pathology, University of California,
San Francisco, California 94143-0506

CLINICAL ABSTRACT:

The patient, a previously healthy 29 year old Norwegian male nurse, was admitted to the with a diagnosis of acute bacterial meningitis.

The patient was in his usual state of good health when he began extensively traveling 9 months prior to presentation. He visited India, Nepal, Thailand, Vietnam, Australia, New Zealand, Malaysia, Indonesia, Fiji, and the Cook Islands before arriving in San Francisco. During his travels, he participated in a single homosexual experience approximately 1-2 months prior to admission, but denied any contact with prostitutes, intravenous drug use, or history of blood transfusions. The week prior to admission, he participated in an organized tour of the Western United States. Upon returning to San Francisco, he complained of feeling "cold"; over the next two days his symptoms progressed to include fever, headache, photophobia, blurred vision, nausea, projectile vomiting, dizziness, and a purulent nasal discharge, all of which prompted him to seek medical attention.

Physical examination reveal a lethargic patient with a temperature of 39.2 C, flushed skin, photophobia, and nuchal rigidity. However, the pupils were round and reactive to light, no papilledema was present, cranial nerves II through XII were intact, and stretch reflexes were symmetrical.

Admission laboratory studies were remarkable for a cloudy cerebrospinal fluid with WBC 6,200/mcl, 70% of which were neutrophils, RBC 1,400/mcl, protein 296 mg/dl and glucose 79 mg/dl (with a concomitant serum glucose of 223 mg/dl). Bacterial, fungal, and acid-fast bacilli cultures were negative, as were a VDRL and a cryptococcal antigen test. Additional laboratory studies included an HIV antibody test and a malaria smear, both of which were negative.

Despite treatment with broad-spectrum antibiotics, the patient's neurologic function rapidly deteriorated as serial CT scans documented worsening cerebral edema. The patient suffered cerebellar herniation on the fourth hospital day, and subsequently expired on the fifth hospital day.

Gross autopsy findings revealed a severely edematous brain weighing 1,830 gm. The meninges were thickened, congested, and coated by a viscid sanguinopurulent exudate. Cerebellar tonsillar herniation was present as well.

MATERIAL SUBMITTED: Two color 2x2 slides and one H & E stained slide.

POINTS FOR DISCUSSION: 1. Etiology?

2. Diagnosis?