

Case 1

Submitted by: R.C. Kim, M.D., and B.H. Choi, M.D.
Laboratory Service, VA Medical Center, Long Beach, CA 90822,
and Department of Pathology, University of California Irvine,
Irvine, CA 92717

Clinical Abstract:

A 76 year old male entered the hospital with a 3-day history of slowly progressive confusion, generalized weakness and fatigue, diarrhea (5-6 watery stools per day), and shaking chills. There was no history of fever, hematemesis, or hematochezia.

On examination, temperature was 99.8°F, pulse rate 128/min, and BP 120/60. He was confused, disoriented, and uncooperative. Although he seemed occasionally to understand questions, he answered in gibberish. The neck was supple. The right pupil showed the residual effects of prior cataract surgery, and the left was covered by corneal scar tissue. Additional findings included questionable diffuse abdominal tenderness with rebound and liquid brown stool that was positive for occult blood. Neurologically, although he was uncooperative and disoriented, cranial nerve and sensorimotor function were judged to be grossly intact; DTR's were symmetrically and normally active; the right plantar was flexor and the left equivocal; and a resting tremor of the arms and legs was noted.

Hemoglobin was 13.1 g/dl, hematocrit 35.4%, and WBC count 7900/mm³.

He became somewhat unresponsive, developed respiratory distress, and, 80 minutes after admission, suffered a respiratory arrest. He was intubated and, because BP was 80 systolic, started on Dopamine. LP returned bloody fluid (O.P. 350 mm H₂O) containing 1703 mg/dl of protein, 70 mg/dl of glucose, 2 RBC's (with hemolysis), 1 WBC/mm³ (lymph), and many gram-positive rods.

At 8½ hours he was totally unresponsive and areflexic. No oculocephalic, corneal, gag, or ice-water caloric responses could be elicited, and there was no spontaneous movement. At 10 hours, WBC count was 1400/mm³ (6% neutrophils, 64% bands, 16% metamyelocytes). He was maintained on antibiotics, mannitol, and pressors, but remained unresponsive and died 14 hours after admission.

Autopsy Findings:

General autopsy revealed the presence of a colonic adenocarcinoma at the hepatic flexure, with perforation and focal pericolonic abscess formation. On examination of the brain the left parietal and occipital lobes were extremely friable and hemorrhagic. Coronal sections of the cerebrum and horizontal sections of the brain stem and cerebellum revealed the presence of marked softening, hemorrhagic discoloration, and gas-cyst formation within those structures adjoining the ventricular system.

Material Submitted: One H&E- and one Gran-stained section of cingulate gyrus

Points for Discussion: 1. Diagnosis
2. Pathogenesis