

Case 2003 - 10

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Clinical History: This 31 year old man was found dead in his bed on a locked ward at a psychiatric center.

He was well until age 27 years, at that time married and working as a chef when his psychiatric disorder began. He was diagnosed with bipolar affective disorder, schizoaffective disorder and polysubstance abuse. Over the course of the next four years, he had multiple psychiatric hospitalizations. Following his penultimate hospitalization, ten months prior to his demise, while living at a local hotel, his mother reported that he was disorganized and unable to care for himself. He displayed bizarre behavior, taking his roommates' possessions and setting fires. He was readmitted to the hospital because his clinic psychiatrist believed him to be potentially harmful to himself and others.

During the final six-week hospitalization, his neurological status progressively worsened. He became unable to perform any activities of daily living, was unable to communicate verbally and did not follow verbal commands. He was unable to feed himself, and was incontinent of urine and feces. He exhibited difficulty ambulating, and required occasional assistance.

The psychiatrist had begun treating him with Clozapine and was monitoring his white blood count weekly (due to the 1-2% risk of agranulocytosis). The final test revealed an elevated white blood cell count of 22,000 cells/micro liter. He was taken to an outside facility for computed tomography of the brain, which was reported as showing a small, irregular focus of decreased attenuation in the right temporal lobe, possibly an infarct. He died three days later.

Necropsy findings: The general autopsy determined that the cause of death was pneumonia. The fixed brain, minus the left occipital lobe (saved for toxicology), weighed 1218 grams. The brain was normal on external examination. Coronal sections of the cerebral hemispheres were remarkable for slight gray discoloration and mild softening, without expansion of the white matter of both temporal lobes that was not well demarcated. In the right cerebral hemisphere, the abnormality extended from the level of the temporal pole to the closure of the occipital horn and on the left, it extended only to level of the atrium of the lateral ventricle. The splenium of the corpus callosum appeared slightly gray and possibly mildly expanded. U-fibers were generally spared. The brainstem and cerebellum were normal. The spinal cord was unremarkable on external examination and on cross sections throughout its length.

Material submitted: One H&E section and one unstained section of temporal lobe

Points for discussion:

1. Diagnosis
2. Pathogenesis