A 64-Year-Old Woman with New-Onset Paranoia

Steven I. Gelber, MD, MPH; and Glen L. Xiong, MD

A 64-year-old woman with no past medical or psychiatric history presented to the emergency department with a sore throat and acute paranoia. On examination, she had a temperature of 97.3°F; heart rate of 113 beats per minute; blood pressure of 151 mm Hg/99 mm Hg; respiratory rate of 16; and pulse oximetry of 96%. Her physical examination did not reveal any significant findings.

The patient believed her neighbors were stealing food from her home and that her husband was feeding piranhas to her. Her husband reported 1 week of intermittent behavioral changes, including accusing others of trying to harm her. The initial physical exam and laboratory studies in the emergency department were unremarkable. Her symptoms were attributed to a psychiatric disorder, and she was transferred to the psychiatric admission unit.

On psychiatric mental status exam, the patient had intermittent behavioral agitation and fluctuating attention span. Her Folstein mini-mental status examination (MMSE) was 22/30, with severe deficits in registration, recall, and orientation. She was returned to the emergency department (ED) for evaluation of delirium.

Upon her return to the ED, the patient had a syncopal episode and became nonresponsive. She required endotracheal intubation and was found to have a pulseless electrical activity cardiac arrest.

Both authors are with the University of California at Davis School of Medicine. Steven I. Gelber, MD, MPH, is Resident Physician, Department of Internal Medicine. Glen L. Xiong, MD, is Assistant Clinical Professor, Department of Psychiatry and Behavioral Sciences.

Address correspondence to: Glen L. Xiong, MD, Department of Psychiatry and Behavioral Sciences, 2230 Stockton Blvd., Sacramento, CA 95817; email: glen.xiong@ucdm.ucdavis.edu.

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During a prolonged resuscitation, an echocardiogram showed a dilated right ventricle, and she was treated with tissue plasminogen activator for a presumed pulmonary embolus (PE), with ensuing recovery of hemodynamic stability. A computed tomography scan showed bilateral PE with significant clot burden. An ultrasound of her lower extremities showed left posterior tibial venous thrombosis. One week later, she was improved clinically and had mild cognitive impairment but no residual delirium. On clinic follow-up 3 months after her initial presentation, her MMSE deficits had completely resolved. She scored 30/30.

DISCUSSION

Although PE is a common cause of mortality in the hospital, presentation in clinical practice is variable, increasing the difficulty of accurate diagnosis. The typical symptoms of dyspnea and chest pain, as well as the clinical signs of tachycardia and tachypnea, are of low sensitivity and specificity. Although proximal deep venous thrombosis is generally a predisposing factor in most cases, it is often not clinically apparent. Diagnosis is delayed for many patients, especially when presentation is atypical, and even more likely when psychiatric symptoms are the presenting chief complaint.

Susceptible patients can experience delirium secondary to almost any systemic medical insult. It is more common among the elderly, the acutely medically ill, and in hospital settings. In this case, new-onset paranoia was the predominant sign of delirium. In retrospect, although the patient’s pulse oximetry of 96% was not remarkably low, in an otherwise healthy patient, it may have suggested an acute or chronic medical condition. Her pulse oximetry and tachycardia may have been the only intimations of a cardiopulmonary cause of this patient’s acute paranoia.

Hypoxia, whether at altitude or due to medical causes, is commonly accepted as a potential precipitant of delirium. There are cases of delirium in elderly patients as the sole presenting symptom of pulmonary emboli. Our case is unique because the cognitive deficits were subtle; the paranoid delusions and behavioral agitation were much more prominent. We hypothesize that small clots causing intermittent hypoxia caused her initial presentation, followed by a much larger clot resulting in her acute decompensation during her subsequent presentation to the ED.

CONCLUSION

PE and other acute medical etiologies should be considered in elderly adults who present with acute paranoia. Although a PE is a rare cause of the acute paranoid delusions, new onset of a primary psychotic disorder in the elderly always requires a thorough medical evaluation and detailed cognitive examination. In this case, the patient’s presenting psychiatric and behavioral symptoms likely led to a delay in a more complete work-up. It is also possible that as her clot burden increased, the changes in her mental status became more evident later when she was examined by the emergency psychiatrist. Fortunately, returning her to the right place at the right time for further medical evaluation facilitated a successful treatment.

REFERENCES