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CASE REPORT

Terminal delirium misdiagnosed as major psychiatric disorder: Palliative care in a psychiatric inpatient unit

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ABSTRACT

Background: Delirium is a neuropsychiatric condition characterized by acute change in cognition and disturbance of consciousness. A similar state during the final days of life is termed "terminal delirium."

Method: We present three cases with end-stage chronic medical problems without any significant psychiatric history who were admitted to an inpatient psychiatric unit or a locked dementia unit for management of "depression," "dementia," or "psychosis."

Conclusions: Early diagnosis of terminal delirium helps prevent patients, family members, and staff from undergoing severe emotional distress and facilitates appropriate end-of-life care.

KEYWORDS: Delirium, Terminal delirium, Depression, Dementia, End-of-life care

INTRODUCTION

Delirium is a neuropsychiatric condition characterized by an acute change in cognition and disturbance of consciousness (Gleason, 2003). Delirium is generally classified as hyperactive, hypoactive, and mixed type based on level of activity, while terminal delirium is a variant that occurs during the final days of life (Moyer, 2011). Patients usually present with agitation, apathy, and perceptual disturbances. Delirium can easily be mistaken by nonpsychiatric providers for a number of primary psychiatric disorders—such as dementia, depression, and psychosis. Rarely, patients may have an unusual presentation, which may pose a dilemma for the psychiatric provider. It is important to remain vigilant while managing patients with an end-stage chronic medical condition.

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METHOD

We present three cases with end-stage chronic medical illness without any significant psychiatric disorders who were admitted to a psychiatric inpatient unit or a locked dementia unit for management of "depression," "dementia," or "psychosis."

CASE 1

A 57-year-old married female with a history of congestive heart failure, type 2 diabetes mellitus, neovascular glaucoma (legally blind), and aortic stenosis was admitted to the cardiology service for treatment of her congestive heart failure.

Her symptoms included painful bilateral pedal edema with ulcers, low-grade fever, and confusion for the past three days as per collateral report from her husband.

During this admission, investigations revealed severe left ventricular enlargement and severely compromised left ventricular systolic function, with an

estimated left ventricular ejection fraction (LVEF) of less than 10%.

The patient was successfully diuresed, resulting in a 6- to 7-pound weight loss. She was discharged to her home with family in stable condition with a plan to follow up for a scheduled visit to the cardiology clinic within two weeks after discharge from the hospital.

She was admitted three and a half weeks later with exacerbation of her congestive heart failure, depressed mood with passive suicidal ideations, and persecutory delusions. As per her history, the patient was found noncompliant to the treatment plan, including medications and low-salt diet. She was restarted on diuretics, after which she developed hypotension and acute kidney injury. Her condition was stabilized by discontinuation of diuretics and slow intravenous fluids. As the patient was deemed clinically stable, cardiac catheterization and implantable cardioverter defibrillator placement were deferred. The psychiatric consult and liaison service was called for stabilization of her acute psychiatric problems.

On initial evaluation by the psychiatric consult service, the patient reported depressive symptoms and a past psychiatric history of long-term childhood sexual trauma by her older brother and both emotional and psychological abuse by her husband throughout their 33 years of marriage. She was diagnosed with depression five years ago, and a trial of sertraline, a selective serotonin reuptake inhibitor, was given, resulting in a partial response. She also reported intermittent use of sleep aids either purchased over the counter or borrowed from a neighbor. She was diagnosed with major depressive disorder, started on sertraline, and placed on close observation for safety.

In the meanwhile, palliative care was consulted to evaluate and determine the goals of care for this patient. The palliative care team arranged a family meeting to discuss the goals of care with the next of kin in the setting of the patient's lacking the capacity to participate in the goals-of-care discussion. The patient was then transferred to the acute inpatient psychiatric unit for further management of her depression and suicidal ideations.

During the initial inpatient psychiatric unit evaluation, the patient was found to be oriented only to self and endorsing visual hallucinations. The visual hallucinations were only present with her eyes open and instantly disappeared when she closed them. The patient's thought process was illogical and disorganized. She denied a depressed mood or suicidal ideations. Her insight and judgment were deemed poor. The diagnosis of delirium, hypoactive type, and Charles Bonnet Syndrome was made.

The palliative care service evaluated the patient and discussed the goals of care with her family—her husband of 33 years and her son. The patient's heart condition, her poor prognosis secondary to an LVEF of less than 10%, and the lack of further alleviating interventions was fully explained to family members. After being informed of the patient's poor medical condition, the family seemed distraught and shocked. They were counseled by the palliative care service and the psychiatric inpatient team. The decision was made to assign her DNR/DNI status and place her under hospice care.

CASE 2

A 77-year-old male with a history of dementia, coronary artery disease, prostate carcinoma, hypertension, chronic obstructive disease, and hyperlipidemia was admitted to the inpatient psychiatric service due to increased agitation at his nursing home.

The patient had a stroke a year earlier and consequently had cardiac catheterization, which revealed an enlarged heart and 100% blockage of the left carotid artery. During this admission, investigations revealed an abnormal EEG with generalized delta/theta slowing, triphasic waves suggestive of moderate encephalopathy, and no epileptiform discharges or seizures. Carotid ultrasound was suggestive of complete occlusion of the left internal carotid artery.

Per collateral information from the patient's wife, he had a worsening in his behavior—with confusion, being delusional, and paranoia—over the past month. He had begun to physically attack staff/residents at the nursing home. The patient's baseline subsequent to the stroke was disorientation to time and location and an inability to identify loved ones. His wife was informed by the patient's cardiologist that because of the extreme amount of blockage in the patient's coronary and carotid arteries, along with the presence of a proximal aortic aneurysm, the patient had "days to one year" to live. The patient was initially placed in hospice care but was later downgraded to nursing home care for "improved cognition and assaultive behavior."

The patient was diagnosed with delirium due to carotid artery disease. He was started on oral atypical antipsychotic risperidone for sleep dysregulation and agitative behavior. Neurology and vascular surgery were consulted and recommended no surgical interventions and a palliative care consult for further management.

The palliative care team recommended placement in hospice care. The patient's wife agreed to these recommendations, and the patient was transferred to the hospice.

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CASE 3

A 65-year-old African-American male with a history of congestive heart failure, type 2 diabetes mellitus, hypertension, and dyslipidemia was admitted to the inpatient medicine service for congestive heart failure and pneumonia.

An echocardiogram showed severe left ventricular enlargement, with an estimated left ventricular ejection fraction (LVEF) of 21%.

The patient's medication list included furosemide, vancomycin, and cefepime. He was prescribed BiPap for sleep apnea. His symptoms were ameliorated by diuresis. The patient was discharged to a locked dementia unit of a nursing home after the third hospitalization within a month. He was readmitted two weeks later to the inpatient psychiatric unit for agitative behavior toward staff and peers at the nursing home. He was subsequently readmitted for neuropsychiatric testing to evaluate cognitive function. The patient was not cooperative during cognitive testing: he became agitated and angry, and the test was stopped. He stated that participating in such questions had previously led to his being "sent to jail [the locked dementia unit]."

Collateral history from the patient's wife and daughter reported a fluctuating course of confusion, perceptual disturbance, and agitated behavior. It always coincided with exacerbation of his congestive heart failure, with no recollection upon resolution of the episode.

The patient had a fluctuating course of disorientation and a disorganized thought process. He had intermittent paranoid delusions of peers stealing from him, which led to agitative behavior.

The patient was started on low-dose of risperidone, which helped improve his thought disorganization, paranoid delusions, and behavioral disturbance. He was deemed to have capacity, and there were no imminent safety concerns. He was discharged to home with palliative care follow-ups.

DISCUSSION

Terminal delirium is a form of the delirious state that occurs during the final days of life. This diagnosis is found in the literature, but it is not a DSM diagnosis. Terminal delirium is often missed in patients having multiple medical conditions or in those with progressive worsening of a chronic medical condition needing frequent hospitalization with a poor prognosis. Due to their complex and prolonged course of medical hospitalization, these patients have a psychiatric diagnosis and are transferred to psychiatric inpatient services for further management of depression, suicidal ideations, agitation, psychosis, and dementia (Schneider et al., 2012), resulting in inadequate management 80% of the time (Michaud et al., 2007; Breitbart & Alici, 2008).

In our three cases, the patients had no significant past psychiatric illness that required inpatient psychiatric care until worsening of their medical condition(s). They were frail due to chronic medical conditions needing frequent hospitalizations. There was involvement of various specialties, but these healthcare professionals failed to identify that the patient's death was near. Delirium is a reliable predictor of nearing death within a few days or weeks (Breitbart & Alici 2008; Jaiswal et al., 2014). Families have reported that agitation makes communicating with their loved ones difficult, and this intensifies their frustration (Morita et al., 2007). It causes a high level of emotional stress for the family members, who are unable to understand the ongoing process, with their loved ones becoming agitated or psychotic when they never had any previous psychiatric problems. We have diagnosed the above cases as terminal delirium, and the palliative team was consulted by the inpatient psychiatry team.

Based on our experiences in managing patients with terminal delirium, the main goal was to provide comfort measures to the patients and help them deal with their death anxiety. We had challenging experiences when informing patients that their death was near due to their delirious condition, in helping them deal with death anxiety when they could understand, and also when dealing with their family's emotions/stress subsequent to informing them that the patient needed z palliative level of care rather than a psychiatric level of care.

Terminal delirium is a form of presentation that occurs prior to death. Dying is a complex process, and diagnosing dying is a clinical skill (Ellershaw & Ward, 2003). Early diagnosis of dying can help patients and their caregivers. According to Glaser and Strauss, theories like context of awareness and dying explain different patterns of onset and course of terminal delirium in dying patients (Glaser & Strauss, 1965; 1968, Copp, 1998). The awareness theory defines certainty of death and time of death. Further, the dying trajectory describes various patterns as a patient approaches death. As in our cases, these patients are often delirious and are mistaken for having a major psychiatric disorder, even with no previous similar history.

Healthcare professionals are often reluctant to diagnose dying due to multiple barriers. Some of these barriers can include physicians feeling helpless due to their inadequate training in taking care of dying patients, an inability to deal with the death anxiety in these patients, a poor ability to communicate with patients/caregivers, hope or belief from patients

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or their caregivers that they may get better, and/or medicolegal concerns (Ellershaw & Ward, 2003).

Death anxiety is described as apprehension generated by an awareness of oncoming death (Abdel-Khalek, 2005). Death anxiety has an impact on a patient's emotional and behavioral outcomes, as it certainly can have adaptive and maladaptive consequences (Lehto & Stein, 2009). Addressing this is very important, as this would help a patient deal with their emotions and in turn help them accept the fact that death is near, so that they could express their final wishes.

The literature has shown that discussing dying, death, and bereavement with terminally ill patients and their caregivers can be less stressful than expected (Emanuel et al., 2004). This is often less distressing to caregivers than labeling their loved ones as being psychiatrically ill. Our main concern was having a frail patient on an inpatient psychiatric unit with a staff that was less trained in identifying and managing serious medical illnesses. Is the patient missing his/her significant time to express their last wishes during the process of decision making to transfer the patient to a psychiatric unit? In other words, is the patient missing their opportunity to have a dignified death?

We strongly believe that our patients required early management with supportive and comfort measures for their end-of-life care. Every effort should be made to encourage and facilitate patient expression of their final wishes by avoiding a delay in informing them that their death is approaching (Jaiswal et al., 2014). This would help patients to express their last wishes and even prevent further worsening of their medical conditions.

We could not identify the factors responsible for such this situation. Why did the primary team failed to predict that the patient's death was near? Was the patient missing his/her important moment to express their last wishes while the primary team wasted time in transferring them? Or was it because the primary team or other specialties involved in their care deferred to psychiatry and thus avoided dealing with the patient's death anxiety? There is a need to explore and identify the factors responsible for such transfer decisions.

We highly recommend a multidisciplinary team approach (Macleod, 2006), coordinating inputs from different specialties and then developing an appropriate management plan. First, it is most important to identify and diagnose the terminal delirium. The psychiatrist can play a crucial role in helping the primary team in this process. Second, inputs from various specialties should be considered to predict the approximate survival time for the patients and to communicate this to their families. This could lead to patients having the best comfort care, a chance to express their last wishes, and allow advanced directives to be drawn up by patients and/or their loved ones.

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