The Role of Population and ED Trends in Delirium Management

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In this issue, Drs Heinrich and Sponagle present a thorough overview of the challenges of detecting and treating delirium in the emergency care setting. They also address the high risks involved when the diagnosis is missed. The difficulties of identifying and appropriately managing delirium are not new. However, the importance of doing so is taking on a greater significance because of certain current and forecasted realities that will affect the nation’s emergency departments (EDs).

Demographic projections suggest that the proportion of elderly persons in the US population will continue to increase. This growth will occur against a backdrop in which EDs nationwide are already strained to provide care, with overall increases in ED use and mounting pressures to decrease patients' length of stay in EDs. The stakes remain high as factors that may predispose to overlook the problem increase.

**ISSUES CURRENTLY AFFECTING EDs**

There are several factors that affect patient care in the emergency setting, including overcrowding, staffing issues, and facility capabilities. There are other issues, however, that are unique to psychiatric emergencies.

**Assumptions About Causes of Psychiatric Disorders**

The clinical assessment of patients with a disturbance of consciousness presents a challenge for clinicians working in emergency care settings. The changes in behavior and alertness that may constitute the chief complaint are far too often attributed reflexively to a psychiatric disorder without first ruling out potential medical causes. This is particularly true for patients with known histories of major mental illness, substance use disorders, or dementia.

Patients with psychiatric disorders are already at risk for receiving substandard medical care in general and have a greater risk of adverse events in the hospital setting. Patients with certain psychiatric disorders are further at risk for medical disorders such as HIV infection and hepatitis C as well as substance use disorders and their sequelae, all of which may predispose to the development of delirium. In addition, many patients with psychiatric disorders are often treated with medications that may cause delirium. These associations are demonstrated in Drs Sponagle and Heinrich's case presentations: the "depressed" 54-year-old man who presents with worsening somnolence had a serious drug interaction; the "emotionally disturbed" 34-year-old woman who had a mental status change from preeclampsia; and the mildly demented 74-year-old man with anxiety, confusion, and hallucinations who was in alcohol withdrawal.

It is tempting to ascribe a known psychiatric diagnosis to a new presentation without a thorough medical evaluation, but doing so can be a lethal mistake. In the emergency care setting, it is important to remember that psychiatric disorders are the diagnoses of exclusion when alteration of consciousness is being assessed.

**Challenges of Assessment**

Assessment of a potentially delirious patient in the acute care setting can be uniquely challenging. First, a thorough clinical examination and history must be performed for a patient who may not be able to provide accurate or useful information. Part of the workup also includes obtaining appropriate diagnostic studies. This may prove difficult when one is faced with opposition from ED or even psychiatric staff who argue that extra studies are not warranted because they believe that the problems are "just psych" in origin and not "medically indicated" or evidence-based.

The paradox here is that the lack of a robust body of literature on the subject is actually being used to withhold an appropriate and necessary workup. This inappropriate application of the so-called mind-brain dichotomy is an obvious disservice to patients and can sometimes lead to poor outcomes.

Once delirium is high on the list of differential diagnoses, the psychiatrist often assumes the roles of diplomat, educator, and patient advocate. Psychiatrists must convey to their colleagues the reasoning behind the claim that a patient's odd behavior is primarily caused by a physiological disturbance that is best treated by another branch of medicine or, at the very least, ruled out by further studies. The risks of admitting a medically unstable patient to a psychiatric unit without easy access to higher levels of medical care can be dire and are described well by Drs Heinrich and
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Crowding and Length of Stay Pressures

A recent report by the Institute of Medicine on the nation’s EDs makes clear that overall use of EDs is increasing, as is the percentage of patients presenting with a psychiatric complaint. The issues of overcrowding and long wait times, both of which adversely affect quality of care, in EDs nationwide are garnering greater attention, especially from emergency medicine physicians and hospital administrators, who feel considerable pressure from a variety of sources to alleviate these problems. The average length of stay for psychiatric patients in EDs is longer, in general, than the average length of stay for patients with nonpsychotic complaints. Thus, "psych cases" are accounting for a greater proportion of total patient hours (number of patients multiplied by length of stay) in the ED as they increase as a percentage of all cases seen (6.5% in 1992 to 8.1% in 2001). These trends have led many hospitals to focus on length of stay for patients with psychiatric complaints as an area for improvement. In addition, these trends may cause some to think that patients with psychiatric complaints are "clogging up" the ED and, unfortunately, form the erroneous conclusion that further workup of potentially delirious patients should be foregone in order to hasten their disposition home or to a psychiatric facility.

Increases in the Geriatric Population

A report by the US Census Bureau estimated that the population aged 65 years or older will double between 2000 and 2030. It also noted that while the overall population is projected to grow 18% between 2010 and 2030, the number of older Americans (65 years or older) is expected to increase 78% and account for 20% of the total population. The percentage of the population termed the "oldest old" (85 years or older) is also expected to increase.

Much of this projected growth in the percentage of elderly persons in the United States will come from the baby boomer generation. This group of persons begins turning 65 in 2011 and will have a profound effect on the US health care system. The normal effects of aging predispose them not only to abnormalities of hepatic and renal function but also to chronic illnesses, dementia, and functional impairment, all of which increase risk of delirium.

Considering the high prevalence of delirium in different settings for elderly persons and the low rates of detection of delirium by clinicians that were cited in Drs Heinrich and Sponagle’s overview article, the projections of a rapidly expanding aging population are sobering, particularly because these persons will present to emergency care settings for treatment in increasing numbers. The association between these risk factors and old age is not new, but the dramatic increase in the number of elderly persons as this generation enters old age will further strain an already struggling health care system.

Prevention of Delirium

A body of literature is now available that focuses on the prevention of delirium in hospitalized older patients and in persons in subacute settings, such as nursing homes. Protocols to prevent delirium in these populations usually involve frequent screening for delirium. Preventive interventions tend to be nonpharmacological and may include the following measures:

- Optimizing the environment for sleep (eg, turning off or dimming lights at night, reducing ambient noise).
- Providing periodic orientation reminders or visual cues.
- Emphasizing mobility while minimizing fall risk.
- Avoiding use of restraints.
- Ensuring adequate hydration.
- Accounting for sensory deficits.
- Carefully monitoring serum electrolyte levels.
- Using medications cautiously.

These efforts to prevent delirium have been successful in decreasing its occurrence in both hospital and subacute settings, which is important because delirium has been associated with worse outcomes, including slowed recoveries from surgery, nursing home placement, and even death. Delirium prevention also has been found to lower nursing home costs.

Although preventive interventions for delirium may not have a large impact on the community-dwelling population, it is plausible that these efforts will reduce the number of patients with delirium from subacute settings who are referred to the ED for evaluation. Some of these preventive interventions may also be useful in the ED to help minimize complications in already delirious patients or in those at risk for delirium.

Evidence-Based Practice

As Drs Heinrich and Sponagle highlighted, much of what could be considered the standard assessment of delirious patients in the emergency setting is not evidence-based. They also noted that even empirical research on delirium management is scant, including that on pharmacological therapy. In addition to programs aimed at preventing delirium, efforts have been made to improve...
screening for early detection of delirium in ICUs. The Confusion Assessment Method (CAM)\textsuperscript{12} was adapted for use in the intensive care setting (the CAM-ICU) and was found to be quick, reliable, and valid.\textsuperscript{13} This adaptation represents an evidence-based practice of screening for delirium, which is now done routinely in ICUs around the country.

Use of the CAM or another delirium screening tool in the emergency care setting, in which delirium can be highly prevalent and routinely missed, could provide an evidence-based approach leading to better detection and outcomes. The challenge will be in ensuring that once delirium is detected, appropriate interventions actually take place.\textsuperscript{14}

**SUMMARY**

The article and case presentations in this issue of *Psychiatric Issues in Emergency Care Settings* review in detail the evaluation and management of delirium and provide instructive case examples. In the ED, delirium is a high-risk, highly prevalent disorder that is frequently overlooked by clinicians. Mounting pressures on EDs to decrease patient length of stay as well as projected demographic changes that may further increase the number of patients with delirium who present to the ED may make a bad situation worse.

The success of delirium screening and prevention strategies in other patient care settings suggests that these modalities may also benefit patients in the ED. Thus, the systematic introduction of these strategies to the emergency setting and further study of the interventions are warranted. *


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