Delirium

Belinda Setters, MD, MS[a,b,*], Laurence M. Solberg, MD[c]

KEYWORDS

• Delirium • Encephalopathy • Acute mental status change • Confusion • Elderly

KEY POINTS

- Delirium is a geriatric syndrome characterized by acute confusion and inattention that may persist in a subacute form lasting for weeks or even months.
- Delirium is a manifestation of an underlying condition and is often considered multifactorial. Common causes in elderly patients include infections, urinary retention, pain, and medication side effects. Finding and treating the underlying causes are key to resolving delirium.
- Delirium has significant morbidity and mortality. It not only increases risk of falls and prolonged hospitalization, it may result in irreversible cognitive decline and even death.
- Because of its association with dementia and poor outcomes, delirium is an important geriatric syndrome for primary care providers to know as they care for an increasing geriatric population.

INTRODUCTION

Delirium is a common neurocognitive disorder characterized by an acute change in cognition, attention, and consciousness that results in what experts describe as brain failure. Delirium has traditionally been discussed in the acute-care setting, where it occurs in up to 80% of patients.[1] Despite much lower incidence of delirium in outpatient care areas, population aging makes it more likely that primary care providers will encounter patients with delirium. These trends, combined with delirium's high morbidity and mortality, make delirium an important topic that primary providers should not ignore.

Delirium is known by a variety of different terms, including altered mental status, acute mental status change, encephalopathy, agitation, altered level of consciousness,

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[a] Department of Internal Medicine, Robley Rex VAMC, University of Louisville, 800 Zorn Avenue, 6 West – GEC #627, Louisville, KY 40206, USA; [b] Inpatient Geriatrics, Department of Family & Geriatric Medicine, Robley Rex VAMC, University of Louisville, 800 Zorn Avenue, 6 West – GEC #627, Louisville, KY 40206, USA; [c] GRECC, Division of Geriatric Medicine, Department of Aging and Geriatric Research, Malcom Randall VAMC, University of Florida College of Medicine, 2004 Mowry Road, Gainesville, FL 32610, USA

* Corresponding author. Department of Internal Medicine, Robley Rex VAMC, University of Louisville, 800 Zorn Avenue, 6 West – GEC #627, Louisville, KY 40206.

E-mail address: belinda.setters@va.gov

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brain failure, and even psychosis. Although these terms are descriptive of symptoms, the ongoing use of so many different terms can be confusing to trainees, providers, and families. In addition, the lack of a clear pathologic process and the slowness of many practitioners to adopt validated diagnostic methods has resulted in continued underdiagnosis.[2]

Delirium has been vaguely described for more than 2 centuries, but it has only been formally defined since the mid-1990s by the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DMS-IV). Earlier editions described organic psychosis symptoms, whereas later editions (DSM-IV and DSM-V) describe it more specifically as an acute change in mental status with a fluctuating course, inattention, disturbance of consciousness, and disorganized thinking.[3] The DSM has become the gold standard from which various screens and assessment criteria have been formulated in an effort to make bedside diagnosis easier and more efficient.

Delirium is not only common but also has a significant health care burden. Although 30% to 40% is preventable,[4–6] once it occurs, delirium results in increased debility and loss of function as well as increased morbidity and mortality and health care costs,[7–12] making it a significant public health burden costing more than $164 billion annually in the United States alone.[12]

EPIDEMIOLOGY

The overall prevalence of delirium varies widely, between 9% and 80% by setting, with lower levels among outpatient and residential care homes.[1,10–13] The lowest incidence occurs in the outpatient office setting, at only 2%,[10,13] but this is expected to increase with population aging and age-associated increases in multimorbidity and dementia.[14,15] In addition, patients presenting with delirium almost always require emergency medical care or hospital admission. Among elderly patients presenting to emergency departments (EDs), up to 17% of all community-dwelling seniors and 40% of nursing home residents present with this diagnosis.[16]

Patients requiring hospital admission, between 18% and 35% of patients had a diagnosis of delirium on admission.[1,16] Once hospitalized, elderly patients have a high risk of developing delirium, especially if they have an underlying dementia disorder. Those in postoperative wards, intensive care units (ICUs), geriatric wards, and hospice wards had the highest prevalence of delirium 50% to 80%.[10,11,13,16,17] Delirium is also prevalent in the skilled nursing facilities and postacute care (PAC) settings after discharge from acute hospitalization, with more than 9% of patients having documented evidence of delirium on admission to PAC facilities.[18] This situation leads to an overall delirium rate of 29% to 64% for older adult patients.[1]

Patients who develop delirium are at increased risk for a variety of poor outcomes, including falls, catheter-associated infections, and debility, as well as prolonged hospital stay, and increased likelihood of physical restraints and antipsychotic medication administration. Patients who develop delirium in the ICU are at 2 to 4 times increased risk for death both during and after hospitalization[13,19,20]; those on general medicine or surgical wards have a 1.5-fold increased risk of death in the year after hospitalization.[21–23] Patients visiting the ED who are diagnosed with delirium have up to 70% increased risk of death in the first 6 months after their visit.[24]

Aging

Although cognitive loss is not a normal aging phenomenon, the development of cognitive loss such as dementia occurs more commonly with aging. Autopsy