The 3 Ds of geriatric psychiatry: A case report

Kartik Singhai¹, Navratan Suthar¹, Pratibha Gehlawat¹

¹Department of Psychiatry, All India Institute of Medical Sciences, Jodhpur, Rajasthan, India

Abstract
The three Ds of geriatric psychiatry—delirium, dementia, and depression are common and challenging diagnoses among elderly. Delirium is often difficult to diagnose and is an independent risk factor for morbidity and mortality in older adults. Dementia also affects a significant number of older adults and is associated with delirium, depression, frailty, and failure to thrive. It is well known that depression too increases with increasing age. These three syndromes can exist simultaneously in the same patient, and often confer increased risk for each other, especially in the geriatric population. Early identification, classification, and differential diagnosis are important at the primary care level for the timely management of these common problems of old age. We present a case of concurrent findings and complexity in the medical literature.

Keywords: Delirium, dementia, depression, geriatrics

Introduction

The three Ds of geriatric psychiatry—delirium, dementia, and depression represent a challenging diagnosis in older adults in primary care. The prevalence of geriatric psychiatric morbidity has been reported at nearly 20.5% in the community.¹ The median prevalence rate of depression is 21.9%, being the most common psychiatric disorder among the elderly population in India.² Dementia has a prevalence of 2.5 to 3.5% and delirium has a prevalence ranging from 11 to 42% in the elderly Indians.³⁻⁶⁻⁷ The prevalence of depression in dementia has been reported to be between 9 and 68% whereas delirium was present in 14 to 57% of patients with dementia.³⁻⁷⁻⁸ A great deal of overlap exists between these syndromes. In some elderly, all three can co-exist at the same time often leading to difficulty in diagnosis and proper management. The role of a primary care physician is most important to help these patients and families recognize these problems and providing guidance on managing symptoms.

Hereby, we present a case of concurrent findings of three Ds of geriatric psychiatry and complexity in the medical literature.³⁻⁸

Case Report

Mr. X, a 70-year-old male, was admitted (for hemodialysis) for treatment of chronic kidney disease (CKD) of 1 year. He was a known case of hypertension for the last 35 years and type 2 diabetes mellitus for 2 years. A referral to Department of Psychiatry was sent to evaluate for altered behavior and low mood. On detailed exploration, forgetfulness of immediate and recent events was present for the last 1.5 years, persistent low mood, along with death wishes for the last 7-8 months and most recently altered behavior with perceptual disturbances for the last 8-10 days.

On examination, the patient was in-attentive and his orientation was impaired. His psychomotor activity was raised and hallucinatory behavior could be observed. He was irritable and did not respond to most questions, neither obeyed any command. On laboratory examination, kidney function tests were deranged. Other parameters (liver function tests, electrolyte levels, haemogram, chest X-ray, thyroid function tests) were within normal limits.

Address for correspondence: Dr. Pratibha Gehlawat, Department of Psychiatry, All India Institute of Medical Sciences, Jodhpur, Rajasthan - 342 005, India. E-mail: drpratibhag2009@gmail.com

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A provisional diagnosis of dementia with depressive disorder with delirium (3D) was made. Along with advice to treat underlying medical illness for delirium, low dose antipsychotic (T. Olanzapine 2.5 mg HS) was given for acute management of delirium. Psychoeducation regarding illness, reorientation, and patient caregiving was taught for dementia and delirium. On daily follow-up over 3 days, patient consciousness and sleep-wake cycle showed significant improvement.

On repeat assessment (after 3 days), findings of forgetfulness of immediate and recent events, low mood, loss of interest in daily activities, irritability and death wishes were confirmed. Mini-Mental State Examination (MMSE) score of 19/30 was obtained. On examination, the patient was conscious, cooperative, and oriented. He appeared sad and depressed.

On neuroimaging, other possible causes of dementia were ruled out. There was no past history of any neurological insult. Antidepressant (T. Escitalopram 5 mg OD) and sedative (T. Lorazepam 1 mg) were prescribed for depression and sleep disturbance. Also, T. Donepezil 5 mg OD was started for his dementia. On follow-up, the patient showed improvement in his depressive symptoms, although his memory problems due to dementia persisted.

**Discussion**

This case highlights that delirium, dementia, and depression exist on a continuum with overlap that can blur the distinguishing lines of diagnosis, especially among geriatric patients. In the index case, referral to psychiatry was sent for altered behavior and low mood and diagnosis of depression, dementia, and delirium was made after careful history-taking and examination. Medical comorbidities like CKD, hypertension, and diabetes mellitus were present in our case. In another similar case, the patient had multiple medical comorbidities, past medical history, and was on multiple pharmaceutical agents. Therefore, the underlying cause of delirium among elderly adults can be mainly attributed to medical comorbidity.

Delirium is experienced by 18% to 40% of patients during their hospital stay. To compound the problem, 32% to 67% of delirious patients go unrecognized by clinicians. Delirium can have significant implications for geriatric patients, with mortality rates as high as 40%. Hence, recognition of delirium is the first and most challenging step for primary health physicians. Early identification is the key to the prompt management of delirium to prevent mortality and significant implications among geriatric patients. A detailed history taking with an emphasis to find the memory disturbances and depressive symptoms in this age group should also be done at the primary care level.

This case illustrates the complex presentation of some geriatric patients along with the presence of other comorbid mental illnesses, mainly dementia and depression, which may be masked by the delirious changes and vice versa. Therefore, diagnostic dilemma persists in geriatric patients with a complex presentation in the primary care setting. Early detection and initiation of treatment in elderly patients can significantly reduce mortality and improve functional outcome. Thus, the primary care provider is in a unique position to make a difference in improving the functioning and quality of life in these patients. Furthermore, treatment interventions may require interdisciplinary support teams of psychiatrists, geriatric specialists, social workers, and therapists sytchiatrists and other clinicians alike need to be more vigilant on the evaluation of such patients for proper comprehensive care.

To conclude, it is emphasized that early detection of delirium, dementia, and depression is imperative in subsequent functional outcomes. Therefore, the implementation of a comprehensive management plan in the primary care setting is crucial in geriatric patients.

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**Conflicts of interest**

There are no conflicts of interest.

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