

CLINICAL VIGNETTE

Dementia in Older Adults: The Importance of Routine Screening for Cognitive Impairment

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Background - Case Presentation

A 67-year-old female was referred to Geriatrics by her primary care provider for gradual memory loss. Past medical history was positive for hypothyroidism, pre-diabetes, dyslipidemia, osteopenia and significant unintentional weight loss. Patient had no history of depression. Her medications were levothyroxine, atorvastatin, and Vitamin D3. Patient had lived by herself for many years, was divorced, had no children, and no close family. She was accompanied to the office visit by one of her neighbors who provided collateral information regarding problems with thought process, judgment and memory, difficulty with remembering medical appointments, how to take medications, and how to use a tool or appliance. Moreover, patient had difficulty with meal preparation, balancing a checkbook, paying her bills, and had gotten lost in the neighborhood where she had lived for over twenty years. The neighbors had noticed the decline for the past few years, but they did not get involved in her care as she did not solicit any help, and was seeing her PCP and specialists. However, they stepped in due to safety concerns when the patient got lost driving in the neighborhood and accompanied her to her PCP office visits to express their concerns.

Prior to the Geriatric medicine referral by her PCP, patient had been reported for self neglect to Adult Protective Services, and a case had been opened pending conservatorship from her remote family.

On geriatric review of systems, patient had unintentional weight loss of about 75 lbs, from 199 lbs in 2016 to 124 lbs in 2019. She reported difficulty with gait and balance, anxiety and depression with apathy alternating with irritability and agitation, mild bilateral hearing loss, and urge incontinence. Her activities of daily living (ADL) were 5 out of 6 (she needed help and reminders for eating) and she was dependent in all instrumental activities of daily living (IADL) - 0/8 (she was not able to take her medications, use the phone, prepare meals, manage money, drive, do moderate housework, laundry, shop for groceries, or get to places beyond walking distance by bus, or taxi).

On physical exam, patient looked older than her stated age. She was oriented to person, but not to place and time. Motor bulk was diminished throughout, gait and stance were impaired, and she was not able to follow directions. She made poor eye contact and her speech was slow, hesitant, monotonous and dull

with long pauses. She demonstrated lability, irritability, anger and anxiety. Thought process was incoherent, illogical and irrelevant to topics being discussed, with tangential speech and circumstantiality. Memory, concentration, and attention were impaired and she had no decision-making capacity.

Her geriatric screenings were positive for malnutrition, alcohol use - AUDIT C positive, anxiety (GAD2), and depression (PHQ2). Her cognitive screen (MiniCOG) was 0/5. Her Montreal Cognitive Assessment Test (MoCA) was 7/30. She scored 1/5 on visuo-spatial/executive function – failed the trail and copying a cube. On the clock, was able to draw a circle, but not able to place all the numbers, nor the clock's hands. Scored 2/3 on naming, 1/6 on attention, 2/3 on language, 0/2 on abstraction, 0/5 on delayed recall, was not able to use cues or multiple choices, and scored 1/6 on orientation.

Laboratory results revealed a normal complete blood count (CBC) and a comprehensive metabolic panel (CMP). TSH was over suppressed at 0.07 (N 0.4-4.5), and fT4 was 2.0 (N 0.8-1.8). Because the patient had been neglectful to take care of her medical insurance, she lost Medicare part B, and brain imaging could not be obtained.

Patient was diagnosed with cognitive impairment and self-neglect and assistance with ADL and IADL was recommended. Due to her cognitive impairment, she was unable to prepare meals and eat properly and hence had a significant unintentional weight loss. Moreover, due to her confusion in taking her thyroid medication correctly, her levels were over suppressed. She had been missing follow up appointments and serial blood work for over eighteen months. In retrospect, these were significant red flags for cognitive impairment, and should have led to an earlier cognitive screening, detailed cognitive assessment as well as multi-disciplinary approach to her multiple medical and social issues. Given the significant delay in diagnosing cognitive impairment, by the time of the encounter within Geriatrics, she had no decision-making capacity and unfortunately no durable power of attorney in place which led to the recommendation for conservatorship.

Discussion

Cognitive Impairment, Social Assessment and Decline in Functional Status

The prevalence of cognitive impairment doubles every 5 years after the age of 65, and approaches 40-50% at the age of 90. Many patients with dementia do not complain of memory loss or even volunteer symptoms of cognitive impairment unless specifically asked. Therefore, an important feature of assessment in older adults should be a brief cognitive screening.

A social assessment of the older adult should include the evaluation of a personal support system, emergency contact, safety of the home environment, need for a caregiver, and the patient's advanced directive. If a patient lives alone and there is no help available, referral to a home health service will assist in determining home safety and level of personal risk.

In older adults, the rapid decline in functional status is usually precipitated by infections, such as urinary tract infections or pneumonia, injuries, such as a fall resulting in hip fractures, or other events such as stroke, or heart failure exacerbation. However, in about a third of the patients, the functional decline is due to loss of compensatory strategies in highly vulnerable and frail older adults under stress and with a low reserve capacity.

Geriatric Screening

Geriatric screening, which focuses on target areas, followed by detailed assessment in the areas of concern, is a valuable tool in a busy office. Some of these targeted areas are also mandatory parts of the Medicare Annual Wellness visit – such as functional ability and level of safety, nutrition, depression and cognitive impairment.

Screening for Cognitive Impairment

It is important for primary care providers to be alert to the early symptoms of cognitive impairment, such as behavioral or personality changes, difficulties in following medical recommendations, managing medications, recurrent hospitalizations due to errors in medication management, concerns for safety reported by family, caregivers, or neighbors, and functional decline. If a patient lives alone, and there is no available informant to interview, the evaluation becomes more difficult, and a home health referral for a visiting nurse and/or social workers could be helpful for gathering more information.

Mini-Cog is a short screening tool that combines a three-word recall and a clock drawing test and is useful in a busy clinical practice to screen for cognitive dysfunction, including executive dysfunction.¹

Case Based Discussion

Our case missed cognitive screening and safety evaluation, which delayed of diagnosis and treatment until the patient had severe functional and cognitive decline, was lacking decision-making capacity, and needed conservatorship.

Conclusion

The diagnosis of cognitive impaired currently relies on clinician suspicion based on patient presentation, and family concerns, and not as a result of routine systematic and formal screening. As such, it is estimated that up to 70% of patient with cognitive impairment are undiagnosed.² Clinicians need to recognize the clinical presentations for cognitive impairment and dementia in order for correct diagnosis in a timely manner, and to address safety concerns early in the process.

Since 2011, cognitive screening for adults over 65 years of age has been recommended by Center of Medicare Services (CMS), and it is a component of the Medicare Annual Wellness visit, with the initial visit, and annually as appropriate.³

In 2014 the U.S. Preventive Services Task Force (USPSTF) recommendation regarding screening for cognitive impairment, noted that “although the overall evidence on routine screening is insufficient, clinicians should remain alert to early signs or symptoms of cognitive impairment (for example, problems with memory or language) and evaluate as appropriate”.⁴

In 2013 the Alzheimer's Association recommended cognitive impairment screening using brief structured assessments (such as the Mini-Cog Test, Alzheimer's Disease 8-Item Informant Interview, or the short version of the Informant Questionnaire on Cognitive Decline in the Elderly) if concern of cognitive impairment, or absence of collateral information.⁵

The Mini-COG Test has been proven to be reliable and efficient in busy practices. Patients who screen positive for cognitive impairment, should be referred to a geriatrician, neurologist and/or to behavioral health provider for formal cognitive/neuropsychological evaluation.

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