

Recognizing dementia see also p 227, 239

Mrs L is an 81-year-old retiree who spends most of her time at home. Her husband brings her to the clinic and reports that, on two occasions recently, Mrs L has lost her way when returning from a grocery near their house. Although Mrs L appears to be happy, her husband states that she often weeps at home for no reason. When asked what she did before she retired, she seems confused. Looking up into the far corner of the room and shaking her head, she is not able to answer the question.

Mr L says that his wife seems to have had memory problems for many years. For the preceding 6 months, she has often forgotten where to find her own clothes and where she placed her house keys. Her family has attributed these occurrences to normal aging and not paid much attention to them. Recently, as her condition has worsened and, especially, after she lost her way, they have become concerned. Her children want to know whether their mother's mental decline is part of normal aging or something else, and they hope to learn why she has become increasingly sad and emotionally unstable.

Mrs L's mental status is formally assessed using the Mini Mental Status Examination (MMSE). Her score on the MMSE is 17, indicating the presence of a cognitive disorder. Clinical assessments over the next several months show progressive deterioration of Mrs L's cognitive abilities. It is apparent that Mrs L has Alzheimer's disease. After educating the family about Alzheimer's and various treatment options, the patient is referred to a mental health specialty facility for older adults. This type of care facility will increase her access to support services, decrease burden on the family, and monitor pharmacologic therapy.

DEMENTIA IN THE PRIMARY CARE SETTING Prevalence

Dementia is the most common cognitive disorder seen in primary care settings. The patient with dementia typically experiences gradual deterioration in brain function that manifests as impairment in cognition (memory deficits, perceptual disturbance) and behavior. Dementia typically manifests slowly over years or decades, differentiating it from delirium, another prevalent cognitive disorder, which is rapid in onset and often is a marker of an acute medical problem.

In the United States, about 4 million individuals have advanced dementia, and an additional 1.5 million people have mild to moderate dementia. With the continuing

Summary points

- The diagnosis of various dementias may be difficult in Asian patients because of the reluctance of family and patients to report symptoms
- Dementia of the Alzheimer's type is particularly difficult to diagnose because recognition of progressive cognitive deficits is required
- Major depression, a treatable disorder, is a common cause of reversible or pseudo-dementia
- It is important to use a culturally appropriate screening tool when screening Asian patients for dementia
- Referring patients with Alzheimer's disease to a specialty center can help to reduce the huge psychological stress and financial burden on the patient and family members

growth of the elderly population, the number of Americans with severe dementia is projected to double by 2020. The prevalence of dementia in Asian Americans in primary care settings is about 9%,^{1,2} which is lower than the 16% prevalence in whites and African Americans.³⁻⁵

Types

Dementia can be roughly categorized into cortical and subcortical types (see box 1), although in the end, all neurodegenerative dementias have both cortical and subcortical pathologic components.

The most common type of dementia encountered in the primary care setting is dementia of the Alzheimer's type (DAT). The clinical diagnosis of DAT requires recognition of progressive cognitive deficits. Although there is no reason to think the progression differs across ethnic groups, the diagnosis of dementias may be more difficult in Asian populations because of the reluctance of patients and their

Box 1 Cortical and subcortical dementias

Cortical dementias

- Typically affect memory, language, spatial cognition, and personality
- Alzheimer's disease is the classic example

Subcortical dementias

- Often disrupt arousal, attention, motivation, and the rate of information processing
- Clinical manifestations are psychomotor retardation, defective recall, inability to handle abstract concepts or thoughts, and mood and personality alterations such as depression and apathy
- Examples include dementia due to human immunodeficiency virus (HIV), Huntington's disease, and Parkinson's disease

Hongtu Chen
Charles B Wang
Community Health
Center
125 Walker St
New York, NY 10013
Sun-Hoo Foo
Division of Neurology
NYU Downtown
Hospital
New York, NY 10038
Wayne Ury
Department of General
Internal Medicine
St Vincent's Hospital
New York, NY 10011

Correspondence to:

Dr Chen
hongtuchen@hotmail.
com

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families to report symptoms. Tactful inquiry is often necessary because many patients defensively resist this probing.

Differential diagnosis

Although DAT is the most common cognitive disorder in primary care, other possibilities should be considered (see box 2).

BARRIERS TO DETECTION

Culturally specific beliefs

Although dementia is an organic psychiatric disorder, its diagnosis, presentation, and management are influenced by the sociocultural context in which it occurs and the meaning of the disorder to the patient and his or her caregivers.⁶

Culturally specific values, concepts of illness, knowledge of curability of an illness, and views of responsibility all affect presentation and help-seeking behavior related to dementia. According to a recent study,⁷ Asian Americans—such as those of Chinese, Japanese, Filipino, and Vietnamese cultural backgrounds—notwithstanding their diversity, share the following common beliefs:

- Dementia is a natural consequence of aging rather than a medical illness
- Dementia is an illness for which no cure is known
- Children are obligated to take care of the older generation
- Problems in a family member should be solved within the family
- To talk about senile problems of a family member is shameful or embarrassing

When these beliefs work together, the natural outcome is that Asian Americans will either never initiate or tremendously delay help-seeking behavior for a demented family member.



Overdose of traditional Chinese medicines and herbs can lead to dementia

Maggie Wong/CBWCHC

Box 2 Differential diagnosis of DAT

- Mental distress, such as depression, anxiety, or acute stress disorders
- Depressive pseudodementia (depression with symptoms similar to dementia but no evidence of an organic brain disorder)
- Vascular dementia
- AIDS dementia
- Dementia induced by substance abuse, including overdose of certain traditional Chinese medicines
- Huntington's disease
- Amnesic disorders, characterized by inability to form new memories and recall old memories, that can be associated with general medical conditions or substance abuse

Underreporting

In our clinical experience, Asian patients and their families typically underreport memory difficulties.

Stigma of mental illness

Because of the stigma associated with dementia, Asian patients in primary care settings rarely initiate conversation about their mental symptoms with their physicians. Likewise, those suffering from forgetfulness hardly ever directly raise their concerns about cognitive difficulties and complaints.⁸

Sometimes a physician will notice that a patient did not take prescribed medicine. The conversation might be something like:

Doctor: *"Have you forgotten to take your tablets this morning?"*

Asian patient [typically trying to pull the conversation back to a "problem-free" zone]: *"Oh, I'm sorry, Doctor! I'll try to not forget again, Doctor"*

Doctor: *"It's all right. You know it is important to take your medicine."*

The harmony between the patient and the doctor is restored, but a valuable chance for identifying the early signs of dementia might be missed.

The stigma of mental illness in general, and cognitive disorders in particular, may account for an unwillingness of Asian patients and their family members to reveal any symptoms that are considered embarrassing or uncomfortable. Fan noticed that many elderly Asian people would never utter a word about their mental symptoms in front of others.⁸ They say that their symptoms are "no big deal," and that "nobody would care," or "nothing can be done about it." Only one of five persons with a memory problem would tell any health professionals about it.⁹ In this situation, the clinician must slow the pace of the interview to allow patients and their families to become comfortable with mental health interviews. Collateral information from friends and family is also important.

Lack of knowledge of health information

Another component of underreporting of symptoms is that family members often fail to recognize the patient's memory problems. Even when they do, one study found that over 50% of patients do not receive subsequent medical evaluation.¹⁰ Public health education programs are desperately needed to help members of Asian communities recognize early signs of dementia and to increase their understanding of dementia and strategies for managing the condition.

At least one study of Japanese Americans supports high rates of "silent" (unrecognized) dementia in Hawaii.¹⁰ Primary care providers are in the best position to pick up this unrecognized dementia in Asian patients, and the use of screening tools for dementia can assist them in this process.

Inappropriate screening tools

The enthusiastic physician who performs screening tests for dementia on patients may note a high false-positive rate in Asians because of an inappropriate choice of screening instrument. Most of the instruments used for screening ethnic Asian populations are adapted from the original versions developed in the West.¹¹ Some are standardized, others are not. Given that the Asian American population is a culturally and linguistically diverse group, it is almost impossible to find an instrument that has been translated for all the necessary languages, not to mention dialects. Sometimes, low performance scores reflect the fact that certain test items do not match the patient's linguistic and

literacy backgrounds rather than that patient has a cognitive deficit. Therefore, selecting a cross-culturally validated instrument is crucial to attaining an accurate evaluation.

Assuming that the appropriate screening instrument has been selected and communication with patients and their families is satisfactory, primary care physicians may find that the rate of positive findings of dementia among Asian Americans is not as high as those reported in white populations. Results of most epidemiologic studies have shown lower prevalence of dementia and Alzheimer's disease in the Chinese population than in whites.³ Studies using apoE ϵ 4 as a biologic marker of Alzheimer's disease also showed a lower frequency of apoE ϵ 4 in Chinese and Japanese persons.^{12,13} These findings suggest the influence of genetic factors in at least some types of dementia in Asians.

SCREENING TESTS

The Mini-Mental Status Examination (MMSE)

The MMSE is the screening instrument used most widely for detecting dementia. Several Chinese versions of the examination have been developed and validated.^{14,15} The Mandarin version used in Shanghai was carefully adapted from the original MMSE and has been used in a large-scale study involving more than 5,000 elderly persons.^{16,17} A Cantonese version of the MMSE, which proposed slightly different cut-off points, was successfully developed in Hong Kong.³

Blessed Orientation-Memory-Concentration (BOMC) test

Fillenbaum and colleagues offered a simpler version of the MMSE that also examines basic cognitive functioning.¹⁸ The BOMC test, with only seven questions (see box 3), is a well-validated screening examination for dementia. The questions are most useful for recognizing diffuse intellectual decline, such as that which occurs in Alzheimer's disease. Although the Chinese version of the BOMC test has been used in previous studies,¹⁹ it has not yet been validated.

Box 3 Items in the Blessed Orientation-Memory-Concentration test

- What year is it now?
- What month is it now?
- Please memorize this phrase: "John Brown, 42 Market Street, Chicago" ("Good. I will be asking you to repeat that in a few minutes.")
- Without looking at your watch, about what time is it?
- Count backwards from 20 to 1
- Say the months of the year in reverse order, starting with the last month
- Repeat the name and address I asked you to remember



Bill Branson/NCI

Diagnostic tests, such as computed tomographic scanning, and culturally appropriate screening tools are used to examine patients with dementia

Clock-drawing task (CDT)

Another test of cognitive function is to ask the patient to draw a clock face. This test is a sensitive measure of constructional apraxia (difficulty drawing complex figures) and may also reflect general deficit in the conception of time. The test is particularly useful as a screening tool to differentiate normal elderly from individuals with Alzheimer's disease.^{20,21}

The clinician hands the patient a piece of unlined paper and instructs the patient to, "Draw a large circle first, then draw numbers inside the circle so that it looks exactly like a clock." When patients are about halfway finished filling in the numbers, they are asked to draw hands on the clock so that the time is 10 minutes after 11 or 20 minutes after 8.

Although various methods for scoring the CDT have been proposed, a 0-4 point scoring method is brief, sensitive, and easy to apply: one point for drawing a closed circle, one point for placing numbers in correct positions, one point for including all 12 correct numbers, and one point for placing the hands in the correct positions. Any cut-off for CDT scores is subjective and arbitrary.

Performance on this brief screening test does not establish whether a patient has dementia. Many patients with brain injury, such as those with stroke, mild to moderate head injury, and even early dementia, perform adequately.

Versions of the CDT in different languages have been validated.^{22,23} The Chinese version of the test has also been developed with a modified scoring method.²⁴ We would expect that the CDT is less culturally biased than a language-based mental status exam. In our clinical experience, however, elderly people may claim that they have never used a clock, suggesting that performance on the CDT could also be limited by a patient's educational or literacy level.

SUGGESTIONS FOR PRACTITIONERS

Given the traditional resistance of Asian communities to seek help for family members with symptoms of dementia, the following suggestions may be helpful:

- Provide health education and counseling regarding dementia to help reduce stigma and improve knowledge about dementia and supportive care services
- Carefully select appropriate screening tools and patiently conduct clinical interviews with family members reporting dementia-related symptoms and events
- Promptly refer patients with DAT to a specialist or specialty center (eg, adult day care, respite care, skilled nursing care provided by home health agencies, local agencies on aging and councils on aging). This step helps to reduce the psychological stress and financial burden on the patient and family

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