## Panel Urges Dementia Be Diagnosed with Care

A consensus panel wants physicians to treat even patients with irreversible dementias and to carefully rule out all reversible forms of the disorder before concluding that a patient's mental decline will unalterably continue

National Institutes of Health consensus panel that met to consider ways of diagnosing dementias\* concluded that all older persons who have any indication of declining mental abilities should have a careful examination by a physician. Treatable, and sometimes reversible, causes of dementia should be carefully ruled out before the disease is diagnosed as Alzheimer's. And no matter what the cause of dementia, the diagnosis should be only the beginning of continuing medical attention. In short, said panel chairman Joseph Foley of Case Western Reserve University School of Medicine, the panel hopes its statement "means that fewer physicians will say, 'This patient is old. What do you expect?" "

The problem confronting the panel and physicians is that there is no definitive way to diagnose dementia. Yet as many as 2 to 5 million older Americans are experiencing severe intellectual declines, according to Foley, and those figures include only those dementias that are incapacitating. "There is a large amount of dementia that is only incapacitating within a family and that never comes to our attention," he adds. As the population ages, more people will develop dementia; the problems of diagnosis are expected to become even more pressing.

Dementia, the conference speakers stressed, is defined by changes in behavior, not by laboratory tests nor by imaging techniques such as CT and PET scans. And it is not always easy to determine when an elderly person is becoming demented. David Drachtman of the University of Massachusetts Medical Center in Worcester explains why. "The real problem is this: The boundaries defining dementia tend to be arbitrary. There is a serious problem deciding when normal aging ends and dementia begins."

Mental capacities generally diminish with age so the question of dementia is one of degree. For example, Drachtman notes, to have an age-adjusted IQ of 100 at age 75 a person needs to get only half as many items correct on the Wechsler Adult Intelligence Scale as he did at age 25. In addition, old people who had better educations and more intellectually demanding jobs tend to do better on tests of mental ability than those who had poor educations and intellectually undemanding jobs. Yet, according to Drachtman, only rarely do physicians take such factors into account when assessing the mental status of elderly individuals.

Drachtman gave two portraits to illustrate the sorts of persons whom he is asked to diagnose. The classical and easy-to-diagnose case is "the 60-year-old executive who has been slipping at work and at home for the past 1 to 2 years." The man's memory is not as good as it used to be, he cannot balance his checkbook, and he can no longer tie his shoelaces. When asked to name the president of the United States, he responds with what Drachtman terms the "mellifluous ingratiating chuckle," saying, "Oh, heh-heh, it's what's his name, the actor."

In contrast, there is the case that Drachtman refers to as "the problem"—a 78-yearold retired factory worker who lives alone. His wife died recently and the man is eating poorly and is unkempt. He has not left his house in 2 weeks, he walks slowly with a stooped posture and speaks so very slowly that it is difficult to have the patience to get a complete medical history or do a complete neurological and mental exam. "Is he demented?" Drachtman asks. "I'm not entirely sure, but I think this is one of the issues we have to address."

Virtually every sort of disease and medication imaginable can cause dementia. The panel listed commonly used drugs, such as antihypertensives and antiulcer agents; disorders of behavior, including depression; metabolic disorders, including hyper- and hypothyroidism and kidney failure; sensory deprivation states, including impaired vision, seclusion, and hospitalization; diseases of the brain, including Alzheimer's disease and multiple sclerosis; vascular disease, including strokes and cardiac arrest; infectious diseases, such as AIDS and viral encephalitis; space-occupying lesions, including brain tumors; nutritional disorders, such as vitamin  $B_6$  deficiency; intoxications, including chronic alcoholism and drugs of abuse; inflammatory and autoimmune diseases. "The list is limitless," says Foley.

Some dementias are reversible, particularly if the cause is promptly identified. These include dementias caused by congestive heart failure, arrhythmias, brain abscesses, vitamin  $B_6$  deficiency, mercury or lead poisoning, and nonmetastatic effects of cancer, for example. Because there are reversible forms of the disorder, "our first obligation is not to allow the remediable to get out of hand," Foley notes.

But as many as 80% of demented patients have Alzheimer's disease or multi-infarct dementia-two causes of intellectual deterioration with bleak prognoses. Alzheimer's disease appears to be the most frequent, perhaps as much as three times as common as multi-infarct dementia, according to conference speakers. Alzheimer's is diagnosed by exclusion-when nothing else accounts for the patient's symptoms, Alzheimer's is invoked. There is no cure for Alzheimer's, and the mental deterioration is irreversible. Yet patients can-and should-be treated, according to the panel. Other factors, such as impaired vision, adverse drug reactions, or nutritional deficiencies, that may be exacerbating mental decline should be corrected. "The aim is to maintain the patient's dignity and performance for as long as possible," Foley says.

Multi-infarct dementia is suspected if the patient has an underlying systemic vascular disease, particularly hypertension, according to panel member John Moosy of the University of Pittsburgh School of Medicine. It is caused by a series of small strokes that progressively destroy portions of the brain. The treatment of multi-infarct dementia is "an issue that is not settled yet," according to Moosy. "In principle, we feel that when hypertension is detected, we should treat it," Moosy says. "But it is not clear whether treatment arrests the dementia or makes no difference."

In conclusion, says Foley, "we are making the very vigorous recommendation that every elderly person who has any indication of mental change should have the attention of a physician." Although, says panel member Jeremiah Kelly of Boston University Medical Center, "for the most part, in the elderly population, we are dealing with irreversible dementias, we are urging physicians to take a careful look at patients with dementia and to focus on improvements."

GINA KOLATA

<sup>\*</sup> The conference, "Differential Diagnosis of Dementing Diseases," was held on 6 to 8 July at the National Institutes of Health, Bethesda, Maryland.