Letter

Recommendations of the American Academy of Neurology for Evaluation of Dementia

To the Editor: In a review on the diagnosis and evaluation of dementia in the November 1995 issue of the *Mayo Clinic Proceedings* (pages 1093 to 1107), Fleming and colleagues incorrectly summarized recommendations of the American Academy of Neurology (AAN) for laboratory studies and cerebral imaging in the evaluation of dementia. The discrepancies arise from Fleming and colleagues' interpretation of statements in a background article[1] that was used to develop, but which does not constitute, the official recommendations of the AAN.[2]

The Quality Standards Subcommittee of the AAN is responsible for developing practice parameters for neurologists for diagnostic procedures, treatment modalities, and clinical disorders. The subcommittee defines practice parameters as results, in the form of one or more specific recommendations, from scientifically based evidence of a particular clinical problem. The Quality Standards Subcommittee incorporates material from background papers into its deliberations and then submits its conclusions for outside review. Documents are revised as necessary and then submitted for input and approval to the Practice Committee and Executive Board of the AAN. The outcome of this process is a set of practice parameters that are results, in the form of one or more specific recommendations, from a scientifically based analysis of a particular clinical problem. The strength of each recommendation is classified into categories based on the quality of the scientific evidence. Standards are generally accepted principles for patient management that reflect a high degree of clinical certainty. Guidelines are recommendations for patient management that may identify a particular strategy or range of management strategies that reflect moderate clinical certainty. Practice options are other strategies for patient management for which clinical certainty is unclear, but they may be considered clinically indicated in certain circumstances.

The official position of the AAN is that diagnostic tests are necessary in the differential diagnosis of dementia to rule out metabolic and structural causes (guideline). The detailed work-up depends on the suspected diagnosis but generally should include the following tests (guideline): complete blood cell count, serum electrolytes (including calcium), glucose, blood urea nitrogen-creatinine, liver function test, thyroid function tests (free thyroid index and thyroid-stimulating hormone), serum vitamin B_{12} level, and syphilis serology. Other tests that may be helpful in certain circumstances but are not recommended as routine studies are as follows (option): erythrocyte sedimentation rate, serum folate level, human immunodeficiency virus (HIV) testing, chest roentgenography, urinalysis, 24-hour urine collection for heavy metals, toxicology screen, neuroimaging study (computed tomography or magnetic resonance imaging), neuropsychologic testing, lumbar puncture, electroencephalography, positron emission tomography, and single-photon emission computed tomography.

Of note, HIV testing and cerebral imaging are not considered by the AAN as routine studies in the evaluation of dementia. HIV testing is classified as an option, but it should be done when appropriate on the basis of the recommendations of the Centers for Disease Control and Prevention. Neuroimaging is also classified as an option, but it should be considered in every patient with dementia on the basis of the clinical representation. Neuroimaging may facilitate identification of potentially treatable conditions that can otherwise be overlooked, such as tumors, subdural hematomas, hydrocephalus, and strokes. These conditions, however, are uncommon when not anticipated clinically, especially when clinical evaluations are performed by experienced examiners. In particular, no consensus exists on the need for such studies in the assessment of patients older than 60 years of age with the insidious onset of dementia without focal signs or symptoms, seizures, or gait disturbances.

Douglas J. Lanska, M.D.
(for the Quality Standards Subcommittee of the American Academy of Neurology)
Sanders Brown Center on Aging
Lexington, Kentucky

REFERENCES

1. Corey-Bloom J, Thal LJ, Galasko D, Folstein M, Drachman D, Raskind M, et al. Diagnosis and evaluation of dementia. Neurology 1995; 45:211-218
2. Practice parameter for diagnosis and evaluation of dementia (summary statement): report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 1994; 44:2203-2206

