Parkinson's disease: How practical are new recommendations?

New recommendations are inconsistent, impractically presented, and largely irrelevant for family physicians

KEITH B. HOLTEN, MD

Clinton Memorial Hospital/University of Cincinnati, Family Practice Residency, Wilmington, Ohio

This feature reviews guidelines when they are developed with high-quality evidence and are relevant to primary care physicians. Now and then, however, it is instructive to critique recommendations that fall short of this mark. Four Parkinson's disease practice parameters recently published by the American Academy of Neurology purport to be explicit, evidence-based, and of high quality; however, we feel these guidelines should be used with caution.

These recommendations for care of the Parkinson's patient were published in Neurology as 4 separate reviews (1-4). The topics covered include diagnosis and prognosis, treatment of motor fluctuations and dyskinesia, neuroprotective strategies, and evaluation and treatment of depression, psychosis, and dementia. There are 201 references. These recommendations were developed by the Quality Standards Subcommittee of the American Academy of Neurology. These guidelines can be accessed on the Web at: www.aan.com/professionals/practice/guideline/index.cfm.

LIMITATIONS OF THESE RECOMMENDATIONS

In these reviews, terminology regarding effectiveness is not consistently used. Instead of stating that a treatment "is effective," the authors report that it "should be considered" or "should be offered."

PRACTICE RECOMMENDATIONS

Diagnosis

- Early falls, poor response to levodopa, symmetry of motor symptoms, and lack of tremor are "probably useful" to suggest other Parkinson-like syndromes, but are not typical for Parkinson's disease
- Levodopa or apomorphine challenge and olfactory testing are "probably useful" in diagnosing Parkinson's disease
- Older age at onset, associated comorbidities, rigidity and bradykinesia at onset, and decreased dopamine responsiveness are associated with poorer prognosis

Treatment

- Entacapone and rasagiline "should be offered" to reduce off time (periods where medications wear off and Parkinson's disease symptoms return) (A). Pergolide, pramipexole, ropinirole, and tolcapone "should be considered" (B). Apomorphine, cabergoline, and selegiline "may be

considered" (C). Current evidence does not support the use of one medication over another in reducing off time (B). Sustained release carbidopa/levodopa and bromocriptine "may be disregarded" to reduce off time (C)
- Amantadine "may be considered" to reduce dyskinesias (C)
- Deep brain stimulation of the subthalamic nucleus "may be considered" for improving motor function and dyskinesias and reducing off time and medication usage (C)

Neuroprotection

- Levodopa "does not appear" to accelerate disease progression
- No treatment is neuroprotective
- No evidence supports vitamin and food additives for improving motor function
- Exercise "may be helpful" for improving motor function
- Speech therapy "may be helpful" for improving speech volume
- Screening and treatment of depression, psychosis, and dementia
- Depression rating scales "should be considered" to screen for depression (B)
- Dementia screening "should be considered" (B)
- Amitriptyline "may be considered" to treat depression without dementia (C)
- Clozapine "should be considered" (C), quetiapine "may be considered" (C), and olanzapine "should not be considered" (B) for psychosis
- Donepezil or rivastigmine "should be considered" for dementia (B)

There is not consistency between the manuscripts. Abstracts in 2 of the publications (2,4) link level of evidence to the summary of recommendations in the abstracts. The other 2 do not.

In all 4 documents the abstracts are written in randomized controlled trial format, which make them difficult to quickly review. They are in question and answer format. There are long blocks of text without figures or tables to aid in learning and retaining the recommendations.

No cost-effectiveness analysis is performed in the reviews. They recommend that deep brain stimulation of the subthalamic nucleus "may be considered" to improve Parkinson's disease symptoms and reduce medication use. But at what cost?

FAST TRACK

The guidelines are not practical for FPs - they discuss olfactory testing and deep brain stimulation but not dose titration of commonly used medications

Because of their perspective from a specialty, these guidelines lack relevance for the family physician. For example, olfactory testing, which they recommend, is impractical for primary care physicians. However, no recommendations discuss dose titration with commonly prescribed medications. There are 3 pages reviewing surgical therapy. ❑

REFERENCES

1. **Suchowersky O, Reich S, Perlmutter J, Zesiewicz T, Gronseth G, Weiner WJ** – Quality Standards Subcommittee of the American Academy of Neurology. Practice Parameter: diagnosis and prognosis of new onset Parkinson disease (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2006; 66:968-975
2. **Pahwa R, Factor SA, Lyons KE, et al** – Quality Standards Subcommittee of the American Academy of Neurology. Practice Parameter: treatment of Parkinson disease with motor fluctuations and dyskinesia (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2006; 66:983-995
3. **Suchowersky O, Gronseth G, Perlmutter J, Reich S, Zesiewicz T, Weiner WJ** – Quality Standards Subcommittee of the American Academy of Neurology. Practice Parameter: neuroprotective strategies and alternative therapies for Parkinson disease (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2006; 66:976-982
4. **Miyasaki JM, Shannon K, Voon V, et al** – Quality Standards Subcommittee of the American Academy of Neurology. Practice Parameter: evaluation and treatment of depression, psychosis, and dementia in Parkinson disease (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2006; 66:996-1002

Article published in THE JOURNAL OF FAMILY PRACTICE. Reprinted with permission of Dowden Health Media.