

that in Group III, revealing the J-curve relation between SBP and the decline in MMSE scores. The relationship between the decline in MMSE scores and diastolic BP also showed a tendency of J-curve relation but failed to be significant ($P < .09$).

Although the duration of follow-up was only 3 years, we revealed an association of high BP with deterioration in cognitive function, adding the J-curve relation between blood pressure and decline in cognitive function in a longitudinal study. Our results also support the findings of Meyer and colleagues,⁵ which showed improvement of cognition after control of SBP from 135 to 150 mm Hg but decline in cognition after lowering SBP below the level of 135 mm Hg in hypertensive patients with multi-infarct dementia. In conclusion, it is worth remembering that not only high blood pressure, but also lower blood pressure, may be associated with later decline in the cognitive function of older people.

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REFERENCES

1. Gale CR, Martyn CN, Cooper C. Cognitive impairment and mortality in a cohort of elderly people. *BMJ* 1996;312:608-611.
2. Elias MF, Wolf PA, D'Agostino RB et al. Untreated blood pressure levels is inversely related to cognitive functioning; the Framingham study. *Am J Epidemiol* 1993;138:353-364.
3. Skoog I, Lemfelt B, Landahl S, et al. 15-year longitudinal study of blood pressure and dementia. *Lancet* 1996;347:1141-1145.
4. Matsubayashi K, Okumiya K, Wada T, et al. Secular improvement in self-care independence of old people living in community in Kahoku, Japan. *Lancet* 1996;347:60.
5. Meyer J S, Judd BW, Tawaklna T, et al. Improved cognition after control of risk factors for multi-infarct dementia. *JAMA* 1986;256:2203-2209.

REHABILITATION OF THE OLDER AMPUTEE

To the Editor: Cutson and Bongiorno's recent review on rehabilitation of the geriatric lower extremity amputee¹ was a timely reminder that age alone is no contraindication to successful prosthetic rehabilitation. Attention to the potential adverse effects of various comorbidities was highlighted, but a highly prevalent one was omitted from their discussion: vision impairment. It is interesting but not surprising that one of the three case summaries included in their article had diabetic retinopathy as a comorbidity.

Beyond age 65, the prevalence of significant vision loss increases progressively until it exceeds 25% in those aged 85 or older.² Several studies^{3,4} have demonstrated that two-thirds or more of blind lower extremity amputees can become successful prosthetic users. Geriatricians need to be aware of this fact lest they succumb to therapeutic nihilism when they encounter such patients.

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REFERENCES

1. Cutson T, Bongiorno D. Rehabilitation of the older lower limb amputee: A brief review. *J Am Geriatr Soc* 1996;44:1388-1393.
2. Havlik RJ. Aging in the eighties. Impaired senses for sound and light in persons aged 65 years and over. Preliminary data from the Supplement on Aging to the National Health Interview Survey, United States, Jan-June, 1984. Advanced Data from Vital and Health Statistics. Hyattsville, MD: US Dept of Health and Human Services, 1986; DHHS Publication no. (PHS) 86-1250.
3. Altner PE, Rusin JJ, DeBoer A. Rehabilitation of blind patients with lower extremity amputations. *Arch Phys Med Rehabil* 1980;61:82-85.
4. Fisher R. Rehabilitation of the blind amputee: A rewarding experience. *Arch Phys Med Rehabil* 1987;68:382-383.

Editors note: The above letter was referred to Dr. Cutson, and her reply follows.

In reply: We appreciate Dr. Wainapel's interest and comments. Visual impairment is certainly a prevalent comorbidity among the older population and one to be considered in any physical rehabilitation endeavor. Our review covered many studies spanning several decades, and visual impairment was not widely considered.

The references provided by Dr. Wainapel illustrate the relative paucity of published data regarding amputee rehabilitation among the visually impaired. Altner et al. report successful rehabilitation in nine of 12 blind lower limb amputee patients, with five regaining preoperative activity level. Fisher reports on the process used in rehabilitation of two blind amputees.

Preoperative ambulatory status is probably a better predictor of successful prosthetic gait training than visual impairment itself; however, more information is certainly needed.

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NORTRIPTYLINE FOR THE TREATMENT OF DEPRESSION IN PROGRESSIVE SUPRANUCLEAR PALSY

To the Editor: A recent report published in the Journal¹ suggested that the use of low doses of amitriptyline may significantly improve the motor dysfunction of patients with progressive supranuclear palsy (PSP). Cholinergic function is impaired in PSP, and these patients may benefit from anticholinergic treatment. Nonetheless, the use of high doses of amitriptyline (up to 200 mg/day) for treatment was associated with a number of toxic effects, including delirium.¹ Engel suggested that "less anticholinergic antidepressant (e.g., nortriptyline) may be less toxic and more effective than amitriptyline in PSP, but this possibility has not been tested."¹

We have tested this hypothesis in a 72-year-old woman with a history of progressive visual disturbances, dizziness, falls, gait instability, rigidity of the trunk and neck, slurred speech, dysphagia, hand tremor, mild aphasia, and marked depressive symptoms (depressed mood, loss of interest and pleasure in activities that were normally pleasurable, fatigability, loss of confidence, irritability, loss of appetite, insomnia, and recurrent thoughts of death). MRI brain imaging was suggestive of putamen, red nucleus, and substantia nigra damage. The patient was started on 375 mg/day of l-dopa with no substantial improvement of the