

# Tips from Other Journals

## Adult Medicine

200 Reducing Post-Hospital Mortality via Individualized Nutrition Plan

## Mental Health

200 Is Donepezil an Effective Treatment for Depression in Older Persons?

Tips from Other Journals are written by the medical editors of *American Family Physician*.

The trade names of drugs listed in Tips from Other Journals are based on what is currently available and not necessarily the brand of drug that was used in the study being discussed.

### Reducing Post-Hospital Mortality via Individualized Nutrition Plan

**Background:** Undernutrition in older persons has been linked with longer hospital stays and greater mortality, and up to 71 percent of older persons requiring hospitalization are believed to be at nutritional risk. A recent review found that nutritional supplementation significantly reduced mortality rates among undernourished patients; however, it is unknown if individualized nutrition therapy during and after hospitalization can also reduce mortality. Feldblum and colleagues investigated the effect of individualized nutrition interventions on mortality and nutritional outcomes in hospitalized older adults.

**The Study:** A total of 259 newly hospitalized patients 65 years or older were enrolled in the study. Those who were determined to be at nutritional risk according to their Mini Nutritional Assessment score and those who lost more than 10 percent of their body weight in the past six months were eligible to participate. Exclusion criteria included cognitive impairment (Mini-Mental State Examination score of less than 23) or a current diagnosis of cancer.

Patients were randomized to receive one of three nutrition interventions: standard hospital care, a single in-hospital dietitian visit, or an in-hospital dietitian visit plus three home dietitian visits postdischarge that included an individualized nutrition plan and patient and caregiver reinforcement.

Nutrition interventions were based on recommendations of the Nutrition Screening Initiative, a project of the American Academy of Family Physicians, the American Dietetic Association, and the National Council on Aging. Patients were followed for six months after hospital discharge and were monitored for functional and cognitive status. The data from both hospital-only intervention groups were combined and compared with the data from the home-visit group.

**Results:** No differences were noted among the groups regarding functional or cognitive status; however, significantly fewer patients in the home-visit group had died after six months than in the other two groups combined (3.8 versus 11.6 percent mortality, respectively;  $P = .046$ ). There was also moderately greater improvement in nutritional status in the home-visit group (the score of the Mini Nutritional Assessment increased from baseline by  $3.0 \pm 2.6$  versus  $1.8 \pm 3.0$  for the other two groups combined;  $P = .004$ ). The home-visit group also had a significantly lower incidence of hypoalbuminemia (i.e., serum albumin level of less than 3.5 g per dL [35 g per L]) after six months than did the other two groups combined (9.7 versus 22.9 percent, respectively;  $P = .03$ ).

**Conclusion:** Individualized nutrition treatment during and after acute hospitalization reduces six-month mortality and moderately improves nutritional status among older adults at nutritional risk, compared with in-hospital management.

KENNETH T. MOON, MD

**Source:** Feldblum J, et al. Individualized nutritional intervention during and after hospitalization: the nutrition intervention study clinical trial. *J Am Geriatr Soc*. January 2011;59(1):10-17.

### Is Donepezil an Effective Treatment for Depression in Older Persons?

**Background:** In older persons, cognitive impairment and depression are often intertwined. Older persons with a major depres- ►

sive episode have a 25 to 30 percent chance of developing cognitive impairment within one year, and cognitive impairment can also be a feature of late-life depression. Cholinesterase inhibitors such as donepezil (Aricapt) may temporarily prevent progression of mild cognitive impairment but could also worsen symptoms of depression because of the potential role of the cholinergic pathway in mediating mood. Reynolds and colleagues compared donepezil and antidepressant therapy with placebo and antidepressant therapy to determine which was more effective at improving cognitive performance.

**The Study:** The authors recruited 130 community-living adults 65 years or older who had a major depressive episode with a score of at least 15 on the Hamilton Rating Scale for Depression (HAM-D), and who were cognitively normal (73 patients) or had mild cognitive impairment (57 patients). Participants were excluded if they had dementia or a substance abuse disorder.

All patients received 12 to 16 weeks of open antidepressant therapy to achieve remission of depression symptoms (defined as a HAM-D score of 10 or less for three consecutive weeks). Patients continued their antidepressant therapy and were randomized to receive either placebo or donepezil in a dosage of 10 mg per day (5 mg per day was used with 30 patients who could not tolerate the higher dosage). Patients were followed for two years. Cognitive instrumental activities of daily living were assessed at baseline and periodically during the study. Primary outcomes measured included global neuropsychological functioning, cognitive instrumental activities of daily living status, and recurrence of major depression.

**Results:** The donepezil group had better cognitive status at 12 months compared with the placebo group, but this was not sustained at two years. The donepezil group had a higher overall recurrence rate of major depression than the placebo group at two years (35 versus 19 percent, respectively;  $P = .05$ ; hazard ratio = 2.09). Twelve (21 percent) of the 57 patients who had mild cognitive impairment initially developed dementia during the study, including nine patients in the placebo group and three patients in the donepezil group. Post-hoc analysis showed that patients taking donepezil who had mild cognitive impairment were significantly less likely to develop dementia than patients with similar cognitive impairment in the placebo group (10 versus 33 percent, respectively;  $P = .05$ ), but the risk of recurrent depression in these patients remained higher (44 versus 12 percent, respectively;  $P = .03$ ). The analysis did not show the same reduction in progression to mild cognitive impairment or dementia in the cognitively intact group, nor did it show any reduction of depression relapse.

**Conclusion:** In cognitively intact but depressed older patients, donepezil has no clear benefit for preventing depression recurrence or the development of mild cognitive impairment or dementia. Among older depressed patients with mild cognitive impairment, donepezil may help prevent progression to dementia over two years, but at a greater risk of recurrent depression.

KENNETH T. MOON, MD

**Source:** Reynolds CF III, et al. Maintenance treatment of depression in old age: a randomized, double-blind, placebo-controlled evaluation of the efficacy and safety of donepezil combined with antidepressant pharmacotherapy. *Arch Gen Psychiatry*. January 2011;68(1):51-60. ■