was 15/6 mm Hg lower in the active treatment group compared to placebo. Active treatment was associated with a 30% reduction in the rate of fatal or non-fatal stroke, a 39% reduction in rate of death from stroke, a 21% reduction in death from any cause, and a 64% reduction in the rate of heart failure. Medication use was well-tolerated.

**CONCLUSIONS**

Antihypertensice treatment with indapamide, with or without perindopril, reduced all cause mortality in this population of subjects ≥ 80 years of age.

**IMPACT ON INTERNAL MEDICINE**

This study is a significant contribution to our approach to an extremely common clinical issue in this fast-emerging population of older adults ≥ age 80 years of age. The data were sufficiently positive that based on favorable clinical outcomes over 1.8 years the study was prematurely stopped for ethical reasons. Moreover, this relatively conservative regimen of a thiazide diuretic (indapamide) with or without an ACE inhibitor (perindopril), along with a conservative target end point (BP of ≤170/80), was associated with benefit in an acceptably short time frame given the age of the participants. Side effects were reactively modest as well. A key consideration of course is the applicability of these data to individual practices. The study cohort represented a healthy population. Individuals with heart failure or dementia were excluded. Chronological age should not be the primary determinant in deciding on antihypertensive therapy for patients ≥ 80 years of age. Careful functional evaluation should allow proper decision making.

**ADDITIONAL REFERENCES**


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**Serum 25-hydroxyvitamin D concentrations and risk for hip fractures**

Cauley JA, LaCroix AZ, Wu L, Hormitz m.


**AIM**

To determine if lower serum concentrations of Vitamin D are associated with hip fractures among older women living in the community.

**METHODS**

This paper outlines a prospective cohort study to test the hypothesis that lower levels of Vitamin D correlate with hip fracture. This nested case control study was drawn from the Women’s Health Initiative Observational Study (WHI-OS) among 400 case-point women with documented hip fracture and 400 control subjects. Serum 25 (OH) vitamin D was measured and patients were followed for a median of 7.1 years (range, 0.7 to 9.3 years) to assess fractures.

**RESULTS**

Mean serum 25(OH) vitamin D concentrations were lower in hip fracture subjects than in control subjects (55.95 nmol/L vs 59.6 nmol/L; P = 0.007); Lower serum 25(OH) vitamin D concentrations increased hip fracture risk (adjusted odds ratio for each 25-nmol/L by 1.33. The risk of fracture increased statistically significantly across quartiles of serum 25(OH) vitamin D.

**CONCLUSIONS**

Low serum 25(OH) vitamin D concentrations are associated with a higher risk for hip fracture.

**IMPACT ON INTERNAL MEDICINE**

The geriatrics/internal medicine literature has been especially prolific this past year in the field of osteoporosis in general and in the role of Vitamin D in particular. It is well known that Vitamin D deficiency as measured by serum 25(OH) vitamin D is widespread in the United States, especially in the frail elderly. Although this deficiency is seen at all geographic latitudes, northern areas with less actinic exposure accentuate the problem. While associations of hip fracture with serum 25(OH) vitamin D deficiency can be documented in well-
designed population studies as typified by this; the pathophysiology of this association is still not precisely defined. In the Cauley study no measurements of bone density were available and some critics have suggested that lower serum 25(OH) vitamin D levels may be simply a marker of frailty, reduced physical activity, dietary patterns, all risk for hip fractures, but not necessarily causally related. This study suggests that the relationship is causal, since the association was evident even when controlled for many of these compounding variables.

Serum 25(OH) vitamin D concentrations are also being implicated in many other disorders, including skeletal muscle function, musculoskeletal pain syndromes, cognition and depression. The references below cite some of these contemporary studies. Internists can substantially “solve” this problem with recognition of the prevalence of relative vitamin D deficiency and insuring properly dietary supplement of Vitamin D and calcium.

ADDITIONAL REFERENCES


Effect of dimebon on cognition, activities of daily living, behavior, and global function in patients with mild-to-moderate Alzheimer’s disease: a randomized, double-blind, placebo-controlled study

Doody RS, Gavrilova SI, Sano M, Thomas RG.


AIM

Current therapies for the treatment of Alzheimer's disease have a small effect size over a relatively short time frame. This purpose of this study was to assess the safety, tolerability, and efficacy of a dimebon in the treatment of patients with moderate-to-mild Alzheimer’s disease.

METHODS

183 PATIENTS WITH MILD-TO-MODERATE Alzheimer's disease (mini-mental state examination (MMSE) scores 10-24) at 11 sites in Russia were enrolled. Patients were randomized to receive dimebon, 20 mg three times daily (60 mg/day), or matched placebo. The initial therapeutic trial ran 6 months, and subsequently a cohort continued for an additional 6 months. The primary outcome measure assessed change in cognition over 26 weeks in the cognitive subscale of the Alzheimer’s disease assessment scale (ADAS-cog). All investigators were blinded. The analysis used an intention to treat strategy.

RESULTS

155 patients completed the trial (78 in the dimebon group, 77 in the placebo group. Treatment with dimebon was associated with significant benefit in ADAS-cog compared with placebo at week 26 (mean drug-placebo difference -4 compared to -2.28 (p

CONCLUSIONS

Dimebon was found to be a safe and well-tolerated agent. The drug significantly improved the overall cognitive function of patients with mild-moderate Alzheimer’s disease. The data suggest a relatively prolonged effect, and an absolute improvement (rather than stabilization) of cognitive function.

IMPACT ON INTERNAL MEDICINE

The current state of the art in the treatment of Alzheimer’s disease is far from satisfactory. Most approved agents are aimed at limited improvement