well-being. It was hypothesized that those receiving the CBI compared to those who did not would show more compliance at 90 and 180 days. Another aim was to explore whether there were differential responses to the CBI according to ethnic group differences. This study analyzed data from a subset of 126 cases from a larger study that recruited 160 women, aged 31-83, 40% African American, who were randomly assigned to CBI or control treatment groups. Compliance was assessed with MEMS. Compliance percentage scores were calculated from events of cap removed from medication bottle and time interval. Eighty percent was selected as criteria for defining high compliers; the baseline score for first 30 days showed no significant differences by group assignment. ANOVA with repeated measures were significantly different (p = 0.02) for compliance scores for six, 30 day time periods, (mean; SD) were 82.5/14.0, 79.69/19.3; 76.6/21.37; 77.19/19.60; 73.04/23.01 and 71.85/23.05, respectively. Greater compliance was demonstrated at each of the six time periods for those assigned to CBI (n = 64) than control (n = 62), although group differences were small. Groups differed on the low of 1 at 30 days to a high of 5.50 percent at 180 days, mean/SD were 83.61/13.71 verses 74.89/22.51. Results indicate that reading framed tailored messages aimed at providing critical knowledge may be a first step toward sustained compliance. This approaches merits further study with individuals being treated for hypertension outside of teaching institutions and may useful for community health care facilities.

Key Words: Medication compliance, Tailored messages, Ethnic differences

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CAN L-ARGININE ACT AS AN ADJUNCT TO NITRATE IN THERAPY FOR SYSTOLIC HYPERTENSION?
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The aortic pulse wave contour in isolated systolic hypertension characteristically shows a prominent reflection peak (quantified as augmentation index, or AIX), which combines with the incident wave and thereby widens pulse pressure. Previous work showed that treatment with isosorbide mononitrate (ISMN) decreased AIXs from 38% (with placebo) to 23%, and also lowered systolic blood pressure 1. In an acute study, L-arginine p.o. enhanced this effect of ISMN 2. Additionally, L-arginine has been reported to prevent development of nitrate tolerance 3. Thus we investigated the adjunctive effect of L-arginine and ISMN on blood pressure and wave reflection in nine patients with isolated systolic hypertension treated long-term with ISMN, 60 or 120 mg, given once daily. They were entered into a randomised crossover study of two 2-week phases separated by one month. In one phase L-arginine was given, and in the other placebo. The previous daily dosage of ISMN was continued throughout, but split into b.i.d., with subjects receiving either 30 mg b.i.d. matched with 250 mg L-arginine q.i.d., or 60 mg b.i.d. matched with 500 mg L-arginine q.i.d. Ambulatory and office blood pressure were recorded at the end of each phase; also, radial, applanation tonometry was used to determine aortic systolic blood pressure and AIXs.

L-arginine had no significant effects on ambulatory blood pressure, on office blood pressure, or on derived aortic blood pressure values. Mean values for 24-hr ambulatory systolic blood pressure were 144 (s.e.m. 5) mm Hg with ISMN + placebo, and 146 (4) mm Hg with ISMN + L-arginine. Corresponding values for 24-hr diastolic blood pressure were 69 (2) and 71 (2) mm Hg. Aortic Aix was 26 (4) % with ISMN + placebo, and 28 (4) % with ISMN + L-arginine.

Thus, the supplemental use of L-arginine did not enhance the chronic depressor effect of ISMN on pulse wave reflection and systolic blood pressure.

References:

Key Words: isolated systolic hypertension, nitrate therapy, L-arginine

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QUALITY OF LIFE MEASURED IN A PRACTICE-BASED HYPERTENSION TRIAL OF AN ANGIOTENSIN RECEPTOR BLOCKER
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Effectiveness of antihypertensive treatment depends not only on the use of drugs that avoid or minimize symptomatic side effects but additionally may be enhanced by therapy that has a positive impact upon quality of life. Thus, we assessed the effect on quality of life on the angiotensin receptor blocker telmisartan and evaluated the validity and practicality of using a formal quality of life instrument in the practice-based setting. A cohort of 2716 hypertensive patients, either untreated or on single agent therapy, were started on, or switched to, telmisartan 40 mg for 2 weeks; in those patients whose blood pressures (BP) remained above 130/85 mmHg, the dose was increased to 80 mg for the additional 4 weeks of treatment. Quality of life was measured by patient self-administration of the Psychological General Well-Being Index (GWBI) at baseline and at the end of the study. Altogether, 1858 (68%) of patients treated with telmisartan completed both GWBI tests; the test score increased by 5.2±0.3 (P<0.0001) from 77.7±0.4. This increase was observed across all 6 emotional and health subscales of the GWBI. White and Black patients, those aged <65 or ≥65 and men and women had similar increases, though the baseline value in women was sharply lower (P<0.001) than in men. The GWBI rose more in patients whose BP was controlled by treatment (BP<140/90 mmHg) than in non-controlled patients (6.1 vs. 4.1, P<0.0001); for all patients, the decreases in systolic and diastolic BP’s correlated significantly (P<0.001 for each) with the increases in the GWBI. In conclusion, telmisartan significantly increased quality of life across all 6 domains of the GWBI; controlling BP appears to an important element in improving subjective emotional and health perceptions of hypertensive patients. The successful use of this instrument in a community-based trial suggests that this approach is valid and useful in clinical practice.

Key Words: Quality of Life, Hypertension, Angiotensin Receptor Blocker